

**PEER REVIEW
COORDINATING DRAFT**

**TASK ANALYSIS
FOR**

**COORDINATE, SYNCHRONIZE,
AND INTEGRATE FIRE SUPPORT
(CRITICAL COMBAT FUNCTION 15)**

AS ACCOMPLISHED BY A BATTALION TASK FORCE

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**Task Analysis for Coordinate, Synchronize, and Integrate
Fire Support as Accomplished by a Battalion Task Force.
Critical Combat Function 15 (CCF 15)**

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BDM Federal, Inc.

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12a. DISTRIBUTION/AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) The purpose of CCF 15 is synchronization and integration of indirect fire support with TF maneuver and direct fires on enemy and terrain in accordance with TF commanders' concept and intent. Employment of indirect fire support assets under TF control to support the TF in mission execution. The outcomes include: 1) Fire support plan includes positioning, allocation and employment of FOs, COLTs, FIST-Vs and ground TACPs, as well as integration of all indirect fires. 2) FOs, COLTs, FIST-Vs, and TACP are positioned to observe, process, and control indirect fire support missions and NAIs, TAI's and preplanned targets. 3) Coordination with supporting field artillery firing HQ, brigade HQ and FSE, and Air Force elements controlling CAS is continuous to ensure synchronization and integration with TF plan and commanders intent. 4) Planned artillery, mortar fires and CAS are timely and accurate; fire support plan is flexible to allow TF Commander and his subordinates to process and control fires on unplanned targets. 5) TF FSO, mortar platoon leader, and TACP provide timely recommendations to Command Group.					
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COORDINATE, SYNCHRONIZE AND INTEGRATE FIRE SUPPORT**

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PREFACE

This task analysis of **Coordinate, Synchronize and Integrate Fire Support, Critical Combat Function 15 (CCF 15)**, is an intermediate product of the process of developing a training strategy for the CCF. This analysis reflects tasks, products, participants required by the TF to employ all aspects of indirect fire support available and under TF control (e.g., Artillery, Mortars, and Close Air Support). The intent of this process is to integrate fires on the enemy or terrain to support a task force commander's concept and intent.

CRITICAL COMBAT FUNCTIONS: *The integration of related players and tasks that represent a source of combat power. The synchronization of critical combat functions provides maneuver commanders at any echelon with a definable outcome that materially affects the battle.*

The battle phases **PLAN, PREPARE, and EXECUTE** relate to the entire battalion task force (TF) battle vice phasing for this particular CCF.

This analysis identifies the tasks that the TF Commander, the TF Staff, key officers and NCOs and all subordinate and supporting elements of the TF must perform to coordinate, synchronize, and integrate all indirect fire support. The processes outlined in this task analysis are never initiated from a standing start due to the continuous nature of the battle. However, for the purposes of analysis and for portrayal, the analysis is depicted as beginning with the receipt of the brigade order. It addresses the actions and coordination activities initiated by the TF Commander and Staff (Planning Phase); continues through the TF preparation for battle by detailing the modification and refinement of the fire support plan process (Preparation Phase); and culminates with the synchronized and integrated employment of indirect fire support during the conduct of battle and consolidation/reorganization following the battle (Execution Phase).

This CCF task analysis focuses on the coordination tasks necessary to synchronize and integrate all indirect fire support with the TF tactical scheme of maneuver and the TFs direct fire plan. Included in this process is the integration of external assets, such as the TACP for CAS, to supplement the habitual indirect fire support package supporting the TF. This CCF does not address those field artillery tasks associated directly with actions taken by the field artillery battalion or the firing batteries in the conduct of their support mission, such as FDC and gun operations. This CCF does not address those tasks taken by Air Force personnel or units to physically prepare CAS aircraft for a mission or those tasks taken by CAS aircraft pilots to deliver their ordnance on targets.

The level of detail and the tasks were selected by the analyst as important to the analysis of the CCF from the perspective of the TF training strategy. Compliance with branch training strategies and proficiency at MTP tasks and subtasks are recognized to be the responsibility of TF subordinate commanders.

In this analysis, an effort was made to identify specific task titles taken directly from the appropriate ARTEP Mission Training Plan (AMTP). Those task titles not taken from the MTP are derived titles that may apply to only part of a subtask or other element of the AMTP; to multiple subtasks from different, but related tasks; or to tasks that are not directly stated in the MTP, but are implied by other tasks or by requirements in an applicable Field Manual (FM) or other related document.

Battalion task force tasks identified in CCF 18 (Plan for Combat Operations), CCF 19 (Direct and Lead Units During Preparation for the Battle), and CCF 20 (Direct and Lead Units in Execution of Battle) have been integrated into this task analysis.

**INDEX OF
CRITICAL COMBAT FUNCTIONS**
Grouped By Battlefield Operating System (BOS)

INTELLIGENCE	(1)	Conduct Intelligence Planning
	(2)	Collect Information
	(3)	Process Information
	(4)	Disseminate Intelligence
MANEUVER	(5)	Conduct Tactical Movement
	(6)	Engage Enemy with Direct Fire and Maneuver
AIR DEFENSE	(16)	Take Active Air Defense Measures
	(17)	Take Passive Air Defense Measures
FIRE SUPPORT	(7)	Employ Mortars
	(8)	Employ Field Artillery
	(9)	Employ Close Air Support
	(10)	Conduct Electronic Collection and Jamming
	(11)	Conduct Battlefield PsyOps
	(12)	Employ Chemical Weapons
	(13)	Conduct Counter Target Acquisition Operations
	(14)	Employ Naval Gunfire
MOBILITY AND SURVIVABILITY	(15)	Coordinate, Synchronize and Integrate Fire Support
	(21)	Overcome Obstacles
	(22)	Enhance Movement
	(23)	Provide Countermobility
	(24)	Enhance Physical Protection
	(25)	Provide Operations Security
	(26)	Conduct Deception Operations
	(27)	Provide Decontamination
COMMAND AND CONTROL	(18)	Plan for Combat Operations
	(19)	Direct and Lead Unit During Preparation for the Battle
	(20)	Direct and Lead Units in Execution of Battle
COMBAT SERVICE SUPPORT	(28)	Provide Transport Services
	(29)	Conduct Supply Operations
	(30)	Provide Personnel Services
	(31)	Maintain Weapons Systems and Equipment
	(32)	Provide Health Services
	(33)	Treat and Evacuate Battlefield Casualties
	(34)	Conduct Enemy Prisoners of War (EPW) Operations
	(35)	Conduct Law and Order Operations
	(36)	Conduct Civil Affairs Operations
	(37)	Provide Sustainment Engineering
	(38)	Evacuate Non-combatants from Area of Operations
	(39)	Provide Field Services

STRUCTURE OF CRITICAL COMBAT FUNCTIONS RELEVANT TO BATTALION TASK FORCE OPERATIONS

CRITICAL COMBAT FUNCTION: *The integration of related players and tasks that represent a source of combat power. The synchronization of critical combat functions provides maneuver commanders at any echelon with a definable outcome that materially affects the battle.*

I. **Intelligence BOS** — The ways and means of acquiring, analyzing and using knowledge of the enemy, weather and terrain required by a commander in planning, preparing and conducting combat operations. These CCF are continuous throughout the planning, preparation and execution phases of the battle.

1. **CCF (1) Conduct Intelligence Planning** — The development and coordination of information relative to the enemy, weather and terrain prior to and during the development of the unit OPORD; the planning to collect information from battlefield sources and to acquire intelligence from other headquarters. Focus of this CCF is the Intelligence Preparation of the Battlefield (IPB). This CCF addresses:

- a. Reconnaissance and Surveillance plan.
- b. Integrated threat templates (doctrinal; event; input to DST).
- c. Terrain and Weather analysis.

2. **CCF (2) Collect Information** — Obtaining information in any manner from TF elements and from sources outside the TF (e.g., higher headquarters; adjacent units); this CCF includes the tasks associated with managing the processes and activities necessary to collect battlefield information which may eventually be used to provide intelligence relative to the enemy, terrain and weather. This CCF addresses:

- a. Information collected as a result of R & S plan.
- b. Continuous information collection and acquisition from all sources.

3. **CCF (3) Process Information** — The conversion of information into intelligence through collation, evaluation, analysis, integration and interpretation in a continual process. This CCF addresses:

- a. Evaluation of threat information.
- b. Evaluation of physical environment information.
- c. Integration of intelligence information.
- d. Development of enemy intentions.
- e. Development of targeting information.
- f. Preparation of intelligence reports.
- g. Update of situational template.
- h. Provision of battlefield area reports.

4. **CCF (4) Disseminate Intelligence** — Transmission of information by any means (verbal, written, electronic etc.), from one person or place to another to provide timely dissemination of critical intelligence to all appropriate members of the combined arms team. This CCF addresses:

- a. The sending of processed intelligence in a timely manner to those on the combined arms team who can by its receipt, take appropriate actions to accomplish the mission. This includes intelligence on the enemy, terrain and weather.

- b. The sending of raw intelligence directly from those responsible for reconnaissance and surveillance to the commander should that raw intelligence be time sensitive (and not be subject to receipt and processing by intelligence analysts).
- c. Dissemination of battlefield reports.

II. **Maneuver BOS** — The employment of direct fire weapons, platforms and systems through movement and fire and maneuver to achieve a position of advantage in respect to enemy ground forces, in order to accomplish the mission. The direct fire weapons are: tank guns; BFV 25mm; anti-tank guns and rockets; attack helicopter guns and rockets; small arms; crew served weapons; directed energy weapons systems.

1. **CCF (5) Conduct Tactical Movement** — Position direct fire weapons systems relative to the enemy to secure or retain positional advantage making full use of terrain and formations. Tactical movement occurs when contact with the enemy is likely or imminent but direct fire engagement has not yet occurred. Units supporting maneuver units are included. This CCF addresses:

- a. Subordinate element OPORD preparation and dissemination.
- b. Preparation for movement.
- c. Movement, mounted and dismounted; on and off road.
- d. Closure of movement — tactical assembly area; tactical positions.
- e. Navigation.
- f. Force protection.
- g. Air movement.

2. **CCF (6) Engage Enemy with Direct Fire and Maneuver** — Entering into ground combat with the enemy using direct fire and/or close combat in order to destroy the enemy or cause him to withdraw. This CCF relates only to those direct fire weapons systems associated with the Maneuver BOS. This CCF is initiated with the OPORD at the completion of the planning phase of the battle and includes all tasks associated with subordinate echelon planning, preparation and execution of the battle. This CCF addresses:

- a. Subordinate element OPORD preparation and dissemination.
- b. Preparation of engagement areas.
- c. Rehearsals of battle plans.
- d. Pre-combat prepare to fire checks.
- e. Target acquisition.
- f. Fire control and distribution.
- g. Fratricide.
- h. Conduct close combat.
- i. Integration of direct fire with maneuver.
- j. Control of terrain.
- k. Prestocked ammunition.
- l. Resupply during operations.
- m. Maintenance during operations.
- n. Consolidation and reorganization.

III. **Fire Support BOS** — The collective, coordinated, and synchronized use of target acquisition data, indirect fire weapons, armed aircraft (less attack helicopters) and other lethal and non-lethal means against ground targets in support of maneuver force operations and to achieve the commanders intent and scheme of maneuver. The Fire Support BOS addresses these weapons: mortars; field artillery; close air support; electronic measures; naval gunfire.

1. **CCF (7) Employ Mortars** — Employment of mortars by the maneuver unit to place fires on the enemy or terrain to support the commander's concept and intent. This CCF initiates with the receipt of an OPORD by the maneuver commander and address those tasks required during the preparation and execution phases of the battle. This CCF addresses:
 - a. Subordinate element OPORD preparation and dissemination.
 - b. Prepare to fire checks.
 - i. Rehearsals.
 - c. Pre-combat checks.
 - d. Development of order to fire.
 - e. Tactical movement.
 - f. FDC operations.
 - g. Target engagements with illumination, smoke, HE.
 - h. Sustainment operations.
2. **CCF (8) Employ Field Artillery** — The ways and means employed by the maneuver unit to cause indirect artillery fires to be placed on the enemy or terrain to support the commander's concept and intent. This CCF initiates upon receipt of an OPORD by the maneuver commander and includes tasks performed during the preparation and execution phases of the battle. The Fire Support Coordination tasks necessary to integrate the field artillery and the maneuver units are the primary focus. This CCF does not address those field artillery tasks associated directly with those actions taken by the batteries of the artillery battalion in the conduct of their support mission such as FDC operations, gun operations, etc. This CCF addresses:
 - a. Fire Support — Maneuver unit rehearsals.
 - b. FSE operations during the preparation and execution phase of the battle.
 - c. FSO and FIST operations in coordination with their maneuver commander.
 - d. Positioning and movement within the maneuver unit sector or zone.
 - e. Indirect fire missions in support of maneuver commander's concept and intent.
 - f. Sustainment operations.
 - g. Indirect fire planning as battlefield METT-T change.
3. **CCF (9) Employ Close Air Support** — Planning for, requesting and employing armed aircraft (less attack helicopters) in coordination with other fire support (lethal and non-lethal) against ground targets in support of the maneuver force commander's concept and intent. This CCF addresses:
 - a. Air-ground attack requests.
 - b. Air space coordination and management.
 - c. Air Liaison Officer, Forward Air Controller, other Army Fire Support Coordination Officer; USN/USMC Bde Team Commander, SALT-O and FCT-O tasks that enable air to ground attacks.
4. **CCF (10) Conduct Electronic Collection and Jamming** — Actions taken to deny the enemy effective command, control and communications of his own tactical force in support of maneuver commander's concept and intent. This CCF includes jamming, deception, and collection.
5. **CCF (11) Conduct Battlefield PsyOps** — Conduct psychological activities as an integral part of combat operations to bring psychological pressure to bear on enemy forces and civilians under enemy control in the battle area, to assist in the achievement of tactical objectives in support of maneuver commander's concept and intent.

6. **CCF (12) Employ Chemical Weapons** — Employ chemical agents or other means to degrade enemy capabilities in support of maneuver commander's concept and intent.
 7. **CCF (13) Conduct Counter Target Acquisition Operations** — Suppress (e.g. using smoke or dazzling illumination) or degrade enemy direct observation, optics, radar, sensors, electronic DF equipment, and imaging systems in support of maneuver commander's concept and intent.
 8. **CCF (14) Employ Naval Gunfire** — The means and ends to provide naval gunfire in support of the maneuver commander's tactical operation.
 9. **CCF (15) Coordinate, Synchronize and Integrate Fire Support** — Coordination of all fire support means in support of the maneuver commanders concept and intent. This CCF addresses the preparation and execution of tasks necessary to integrate the fire support detailed in the OPORD. The CCF integrates CCF 7-14 in support of maneuver commander's concept and intent.
- IV. **Air Defense BOS** — The means and measures organic or assigned to the maneuver commander which when employed successfully will nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne.
1. **CCF (16) Take Active Air Defense Measures** — Application of firepower to destroy enemy air targets. This CCF addresses the coordinating tasks which enable the maneuver commander to successfully employ any attached or assigned air defense weapons system as well as the tasks necessary to employ all organic weapons systems against enemy air targets. This CCF addresses:
 - a. Employment of Air Defense Artillery guns and missiles.
 - b. Employment of maneuver unit weapons systems such as small arms, automatic weapons, BFV 25 mm and TOW missiles, tank main gun against enemy air.
 - c. Airspace management.
 - d. Early warning.
 - e. Sustainment.
 2. **CCF (17) Take Passive Air Defense Measures** — The protection of the maneuver force from enemy air by means other than weapons. This CCF will focus on the preparation and execution phases of the battle. This CCF addresses:
 - a. Early warning.
 - b. Dispersion.
 - c. Cover and concealment.
 - d. Air watch.
 - e. Deception.
- V. **Command and Control BOS** — The way and means a maneuver commander exercises authority and direction over organic and assigned combat power in the accomplishment of the mission.
1. **CCF (18) Plan for Combat Operations** — The integration of all members of the combined arms team in the coordinated development of the maneuver unit Operations Order which will guide the activities of the combined arms team in conducting combat

operations to accomplish assigned missions. The product/outcome of this CCF is a briefed, understood OPORD. This CCF addresses:

- a. Receipt and analysis of higher HQ OPORD.
- b. Issuance of Warning Order.
- c. Restated mission statement.
- d. Commander's estimate process/troop leading procedures.
- e. Commander's guidance.
- f. Mission analysis (includes course of action development).
- g. Decision brief to commander.
- h. Development of a synchronized OPORD.
- i. Reproduction and distribution of OPORD to all participants.
- j. Briefing of OPORD; understanding of order by participants.
- k. FRAGO planning and issue.

2. **CCF (19) Direct and Lead Unit during Preparation for the Battle** — The ways and means to prepare combined arms task force for the battle so that the combined arms task force is ready to support the maneuver commander's concept and intent. This CCF addresses:

- a. Commander's activities.
- b. Communicating information.
- c. Briefbacks and backbriefs.
- d. Rehearsals.
- e. Management of the means of communicating information.
- f. Maintaining and updating information and force status.
- g. Managing information distribution.
- h. Decisions to act or change ongoing actions.
- i. Confirming IPB through the reconnaissance effort.
- j. Determining actions to implement decisions.
- k. Providing command presence.
- l. Maintaining unit discipline.
- m. Synchronizing tactical operations (e.g., execution matrix DST).
- n. TOC operations (e.g., staff integration and battle tracking).
- o. Continuity of command.
- p. Second in command (2IC responsibilities).
- q. Continuous and sustained operations.
- r. Communications (e.g., planning, installation and operation of system, management, site selection).

3. **CCF (20) Direct and Lead Units In Execution of Battle** — The ways and means to command and control in the combined arms task force execution of the battle plan (engaging the enemy in battle) to accomplish the maneuver commander's concept and intent. This CCF addresses:

- a. Directing the conduct of the battle.
- b. Issue orders.
- c. Command presence.
- d. Information distribution.
- e. Decide on need for action or change.
- f. Maintaining unit discipline.
- g. Synchronizing tactical operations.
- h. TOC operations (includes CP displacement, security, survivability).
- i. Continuity of command (e.g., C2 redundancy).
- j. Second in command (2IC) responsibilities.

- k. Continuous and sustained operations.
- l. Consolidation and reorganization.

VI. **Mobility and Survivability BOS** — The ways and means of the force that permit freedom of movement, relative to the enemy, while retaining the task force ability to fulfill its primary mission as well as the measures the force takes to remain viable and functional by protection from the effects of enemy weapons systems and natural occurrences.

1. **CCF (21) Overcome Obstacles** — Enabling the maneuver force to maintain its mobility by removing or clearing/reducing natural and man-made obstacles. This CCF will initiate after receipt of the OPORD and address subordinate echelon planning as well as task force preparation and execution tasks necessary to achieve the maneuver commander's concept and intent. This CCF addresses:
 - a. Breach obstacle. Clearing a path or lane for personnel and equipment through a battlefield obstacle.
 - b. Cross gaps. Passing through or over any battlefield terrain feature, wet or dry, that is too wide to be overcome by organic/self bridging.
2. **CCF (22) Enhance movement** — Provision of adequate mobility for the maneuver unit in its area of operations. This CCF addresses:
 - a. Construction and repair of combat roads and trails.
 - b. Construction or repair of forward airfields.
 - c. Facilitating movement on routes. (This includes control of road traffic and control of refugees and stragglers.)
 - d. Tracking status of routes.
 - e. Host nation support.
3. **CCF (23) Provide Countermobility** — Delaying, channeling, or stopping offensive movement by the enemy consistent with the commander's concept and intent by enhancing the effectiveness of friendly direct and indirect weapons systems. This CCF addresses:
 - a. Emplacement of mines and complex obstacles.
 - b. Digging tank ditches.
 - c. Creation of road craters with explosives.
 - d. Terrain enhancement.
4. **CCF (24) Enhance Physical Protection** — Providing protection of friendly forces on the battlefield by enhancing the physical protection of personnel, equipment and weapons systems, and supplies. This CCF addresses:
 - a. Construction of fighting positions.
 - b. Preparation of protective positions.
 - c. Employment of protective equipment.
5. **CCF (25) Provide Operations Security** — Denying information to the enemy about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting military operations. This CCF addresses:
 - a. Analysis to determine key assets and threats to them.
 - b. Cover and concealment.
 - c. Camouflage.

- d. Noise and light discipline.
 - e. Counter reconnaissance.
 - f. Smoke/obscurants.
 - g. Physical security measures.
 - h. Signal security.
 - i. Electronic security.
6. **CCF (26) Conduct Deception Operations** — Taking actions to mask the real objectives of tactical operations in order to delay effective enemy reaction. This CCF addresses:
- a. Physical deception.
 - b. Electronic deception.
7. **CCF (27) Provide Decontamination** — Making any person, object or area safe by absorbing, destroying, neutralizing, making harmless or removing chemical or biological agents, or by removing radioactive material. This CCF addresses:
- a. Decontamination of individual soldiers and equipment.
 - b. Decontamination of weapon systems and supplies.
 - c. Hasty and deliberate decontamination.

VII. **Combat Service Support BOS** — The support, assistance and service provided to sustain forces, primarily in the area of logistics, personnel services and health services.

1. **CCF (28) Provide Transport Services** — Providing or coordinating for transportation which will assure sustainment support operations in support of the maneuver commander. Upon receipt of an OPORD, this CCF addresses preparation and execution tasks necessary to achieve transportation support of the maneuver force. This CCF addresses:
- a. Movement of cargo, equipment and personnel by surface or air.
 - b. Loading, transloading and unloading material and supplies.
2. **CCF (29) Conduct Supply Operations** — Providing the items necessary to equip, maintain and operate the force during the preparation and execution phases of the battle. This CCF addresses:
- a. Requesting, receiving, procuring, storing, protecting, relocating and issuing supplies to the specific elements of the force.
 - b. Providing munitions to weapons systems.
 - c. Providing fuel and petroleum products to equipment and weapons systems.
 - d. Reporting status.
3. **CCF (30) Provide Personnel Services** — Management and execution of all personnel-related matters to sustain the force. This CCF addresses:
- a. Personnel Administrative Services.
 - 1) Replacement, casualty reporting.
 - 2) Awards and decorations.
 - 3) Postal Operations.
 - 4) Promotions, reductions.

- b. Financial services.
 - c. Unit Ministry team.
 - d. Legal.
 - e. Public Affairs.
 - f. Reporting personnel status.
 - g. Preservation of the force through safety.
 - h. Management of stress.
4. **CCF (31) Maintain Weapons Systems and Equipment** — Preservation and repair of weapons systems and equipment. This CCF includes the provision of repair parts and end items to all members of the combined arms team before, during and after the battle. Included also is doctrinal echeloning of maintenance (organization, DS, GS). This CCF addresses:
- a. Preventative Maintenance.
 - b. Recovery.
 - c. Diagnosis, substitution, exchange, repair and return of equipment and weapons systems to the combined arms force.
 - d. Reporting status.
5. **CCF (32) Provide Health Services** — Performance, provision or arrangement for health services regardless of location, to promote, improve, conserve or restore the mental or physical well-being of individuals or groups. This CCF addresses
- a. Preventive medicine.
 - b. Field sanitation.
6. **CCF (33) Treat and Evacuate Battlefield Casualties** — Application of medical procedures on battlefield casualties beginning with "buddy aid" through trained medical personnel. The CCF includes movement of casualties from the forward edge of the battlefield back to division-level medical facilities. This CCF addresses:
- a. Triage of battlefield casualties.
 - b. Treatment and movement of casualties to rear (medevac).
 - 1) Identification of levels of care and locations.
 - 2) Synchronization and coordination of movement of medical facilities to ensure continuity of care.
 - 3) Establishment and maintenance of communications with redundant means.
 - 4) Rehearsals.
 - 5) Resupply.
 - c. Evacuation:
 - 1) Ground ambulance.
 - 2) Aero medevac.
 - 3) Non-standard evacuation.
 - d. Handling and processing the remains of soldiers who have died of wounds.
 - e. Reporting status.
7. **CCF (34) Conduct Enemy Prisoners of War (EPW) Operations** — The collection, processing, evacuation and safeguarding of enemy prisoners of war. This CCF addresses:
- a. Collecting and evacuating EPW.
 - b. Searching, segregating, safeguarding, silencing, and rapid rearward movement of EPW.

8. **CCF (35) Conduct Law and Order Operations** — Enforcement of laws and regulations and maintenance of units and personnel discipline.
9. **CCF (36) Conduct Civil Affairs Operations** — Conduct of those phases of the activities of a tactical commander which embrace the relationship between the military forces and civil authorities, and the citizens in a friendly or occupied country or area when U.S. military forces are present.
10. **CCF (37) Provide Sustainment Engineering** — The repair and construction of facilities and lines of communication. This CCF addresses:
 - a. Rear area restoration.
 - b. Construction and maintenance of lines of communication (roads, railroads, ports, airfields).
 - c. Construction support:
 - 1) Marshaling, distribution and storage facilities.
 - 2) Pipelines.
 - 3) Fixed facilities.
 - 4) Drill wells.
 - 5) Dismantlement of fortifications.
11. **CCF (38) Evacuate Non-combatants from Area of Operations** — The use of available military and host-nation resources for the evacuation of US forces, dependents, US government civilian employees, and private citizens (US and other). This CCF addresses:
 - a. Medical support.
 - b. Transportation.
 - c. Security.
 - d. Preparation of temporary shelters.
 - e. Operation of clothing exchange facilities.
 - f. Operation of bathing facilities.
 - g. Graves registration.
 - h. Laundry.
 - i. Feeding.
12. **CCF (39) Provide Field Services** — Performance of service logistics functions by and for Army elements in the field. This CCF addresses:
 - a. Clothing exchange.
 - b. Bathing facilities.
 - c. Graves registration.
 - d. Laundry and clothes renovation.
 - e. Bakeries.
 - f. Feeding (rations supply, kitchens).
 - g. Salvage.

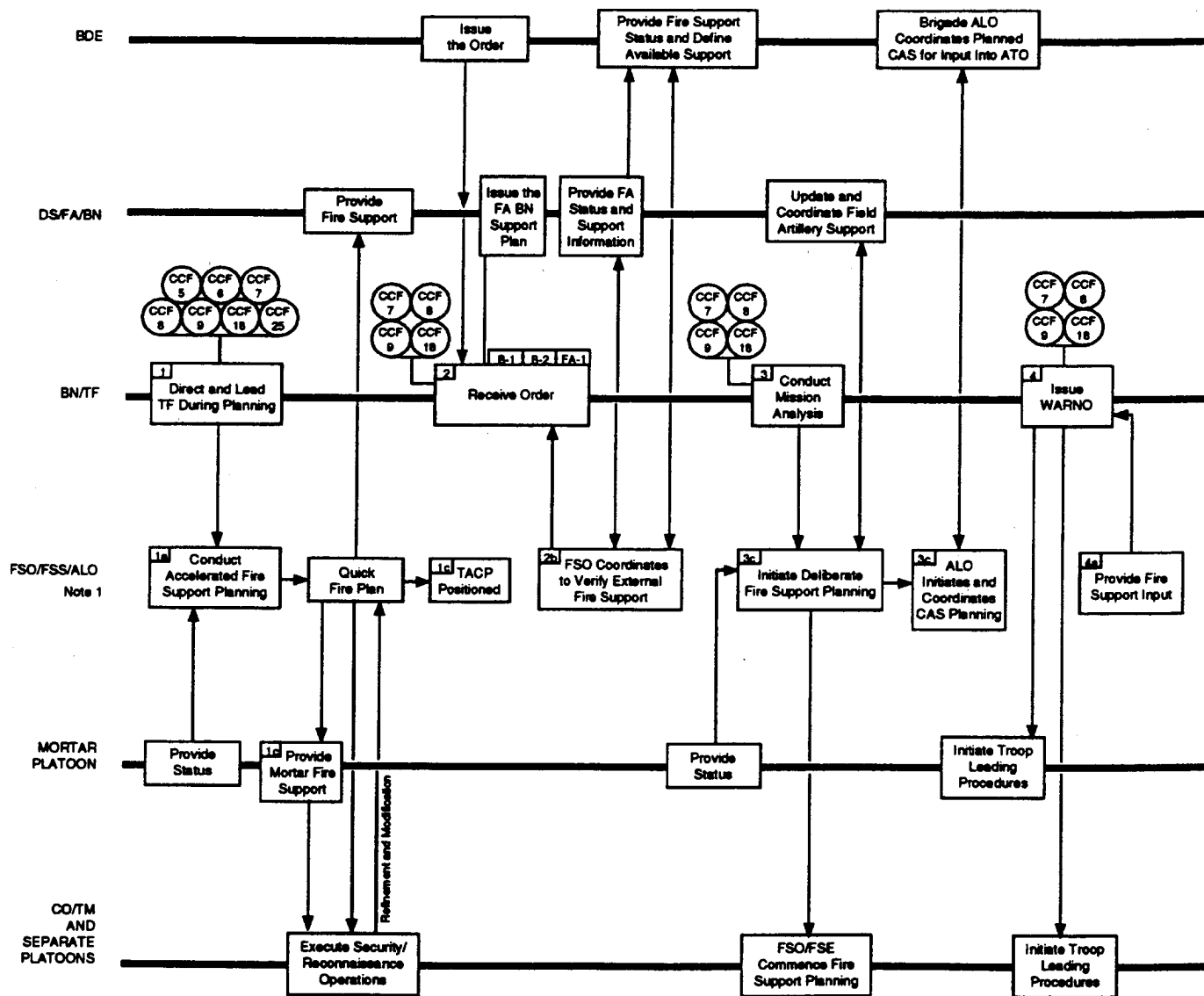
OUTCOMES AND PURPOSE OF CCF 15

OUTCOMES

1. Fire support plan includes positioning, allocation, and employment of FOs, COLTs, FIST-Vs and ground TACPs, as well as integration of all indirect fires, to support the TF plan and commanders guidance.
2. FOs, COLTs, FIST-Vs, and TACP are positioned to observe, process, and control indirect fire support missions and NAIs, TAIs, and preplanned targets.
3. Coordination with supporting field artillery firing headquarters, brigade headquarters and FSE, and Air Force elements controlling CAS is continuous to ensure synchronization and integration with TF maneuver and direct fire plan in accordance with the TF plan and commanders intent.
4. Planned artillery and mortar fires and CAS are provided in a timely and accurate manner; fire support plan is flexible to allow TF Commander and his subordinates to process and control fires on unplanned targets.
5. TF FSO, mortar platoon leader, and TACP provide timely, accurate recommendations to the Command Group on employment of respective fire support assets during mission execution.

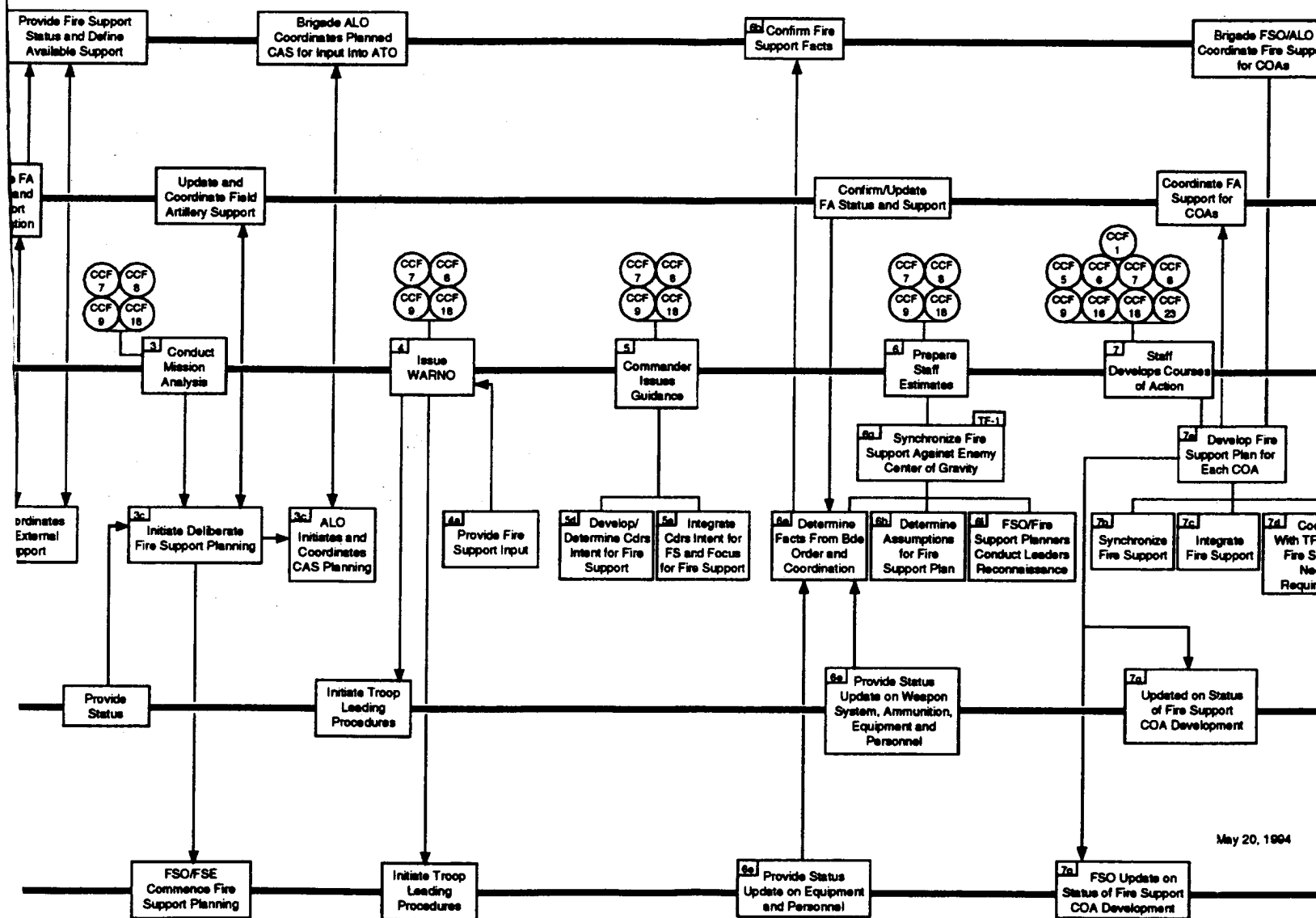
PURPOSE

Synchronization and integration of indirect fire support with TF maneuver and direct fires on enemy and terrain in accordance with TF commander's concept and intent. Employment of indirect fire support assets under TF control to support the TF in mission execution.



Note 1: In absence of ALO, TF FSO conducts CAS planning.

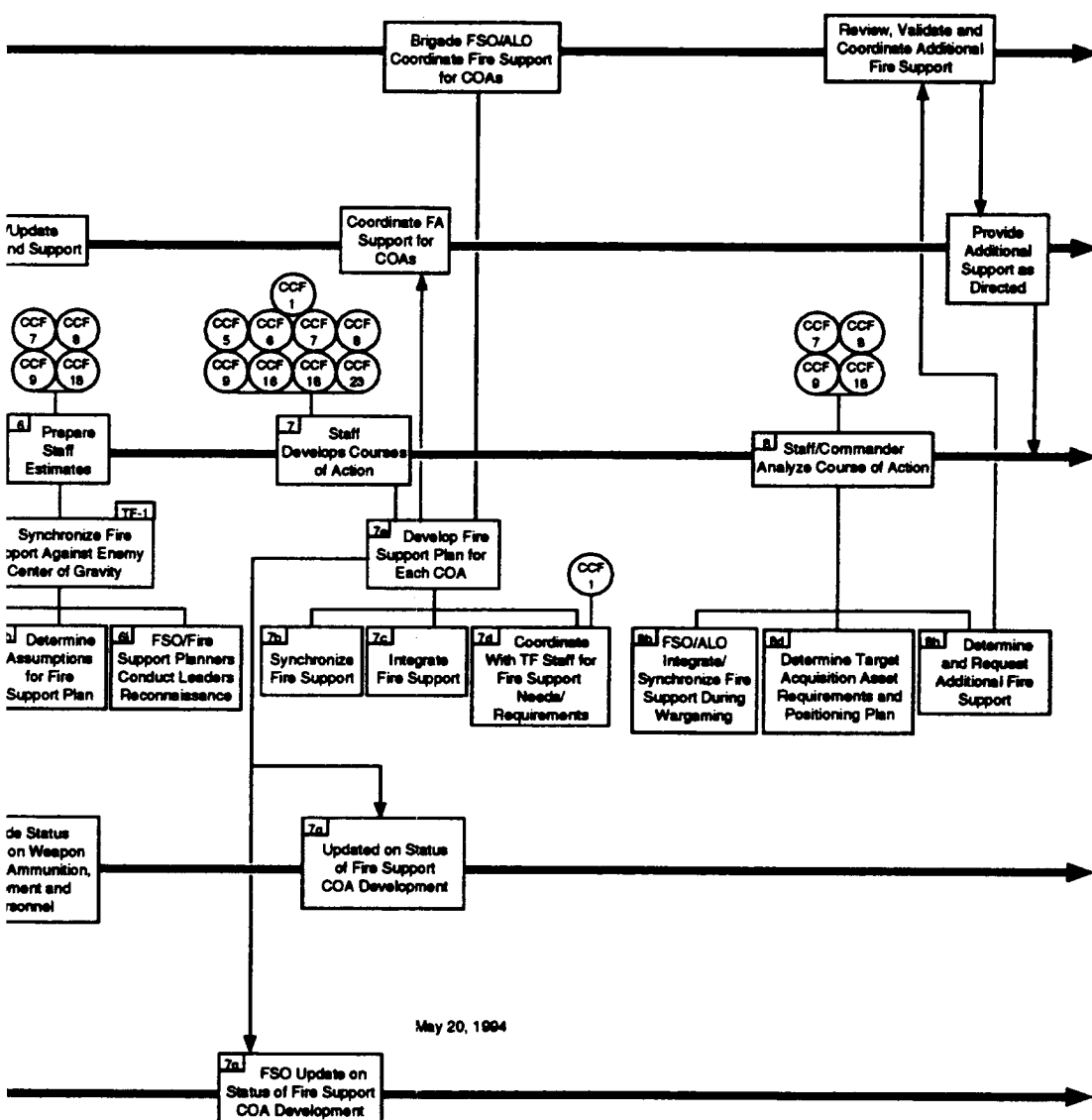
TASK FLOW PLAN



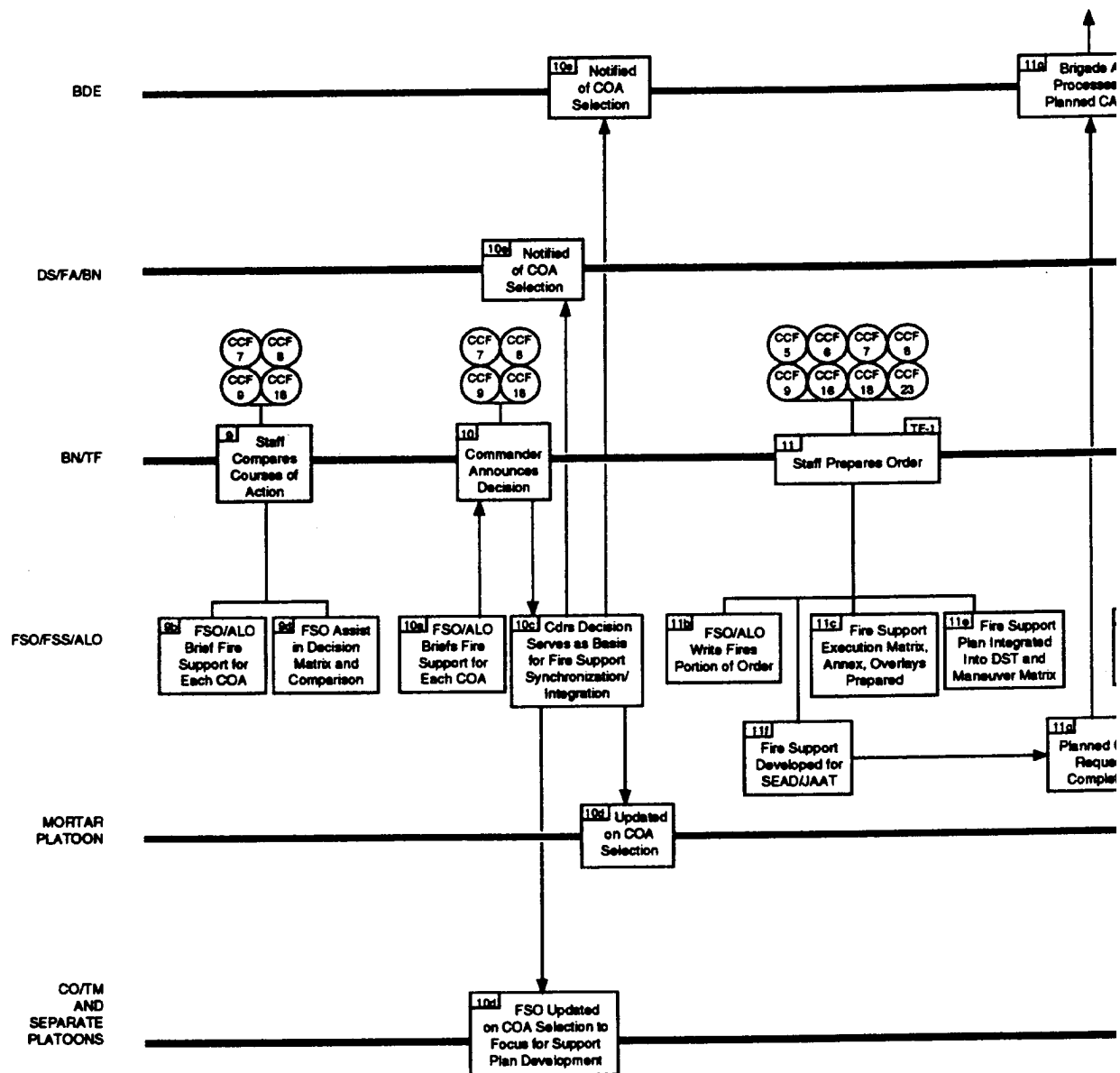
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Note 1: In absence of ALO, TF FSO conducts CAS planning.

CCF 15 — Coordinate, Synchronize and Integrate Fire Support



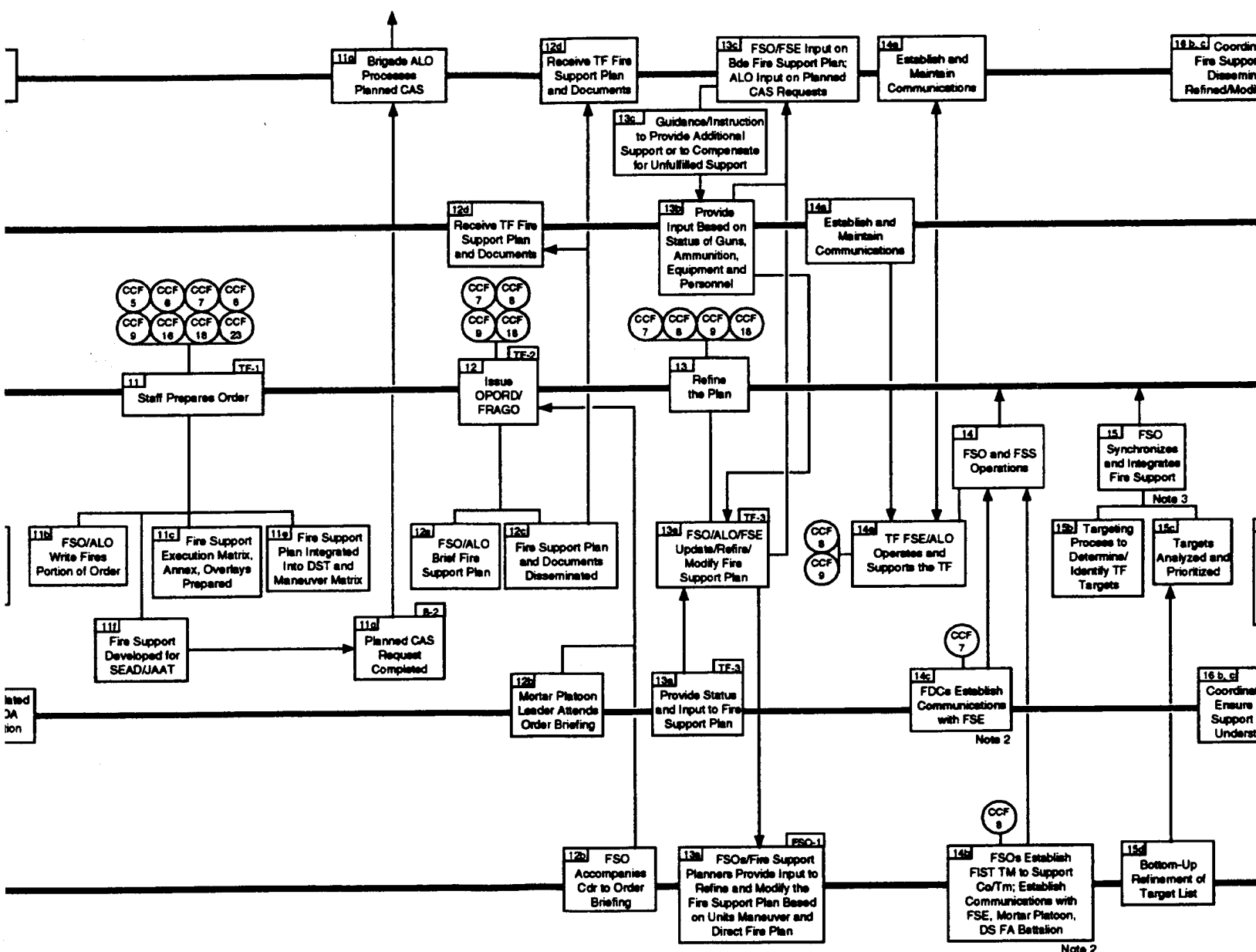
May 20, 1994



Note 2: TF FSE and Co/Tm FIST HQ is established early in the planning process; operational at the time of the attack.

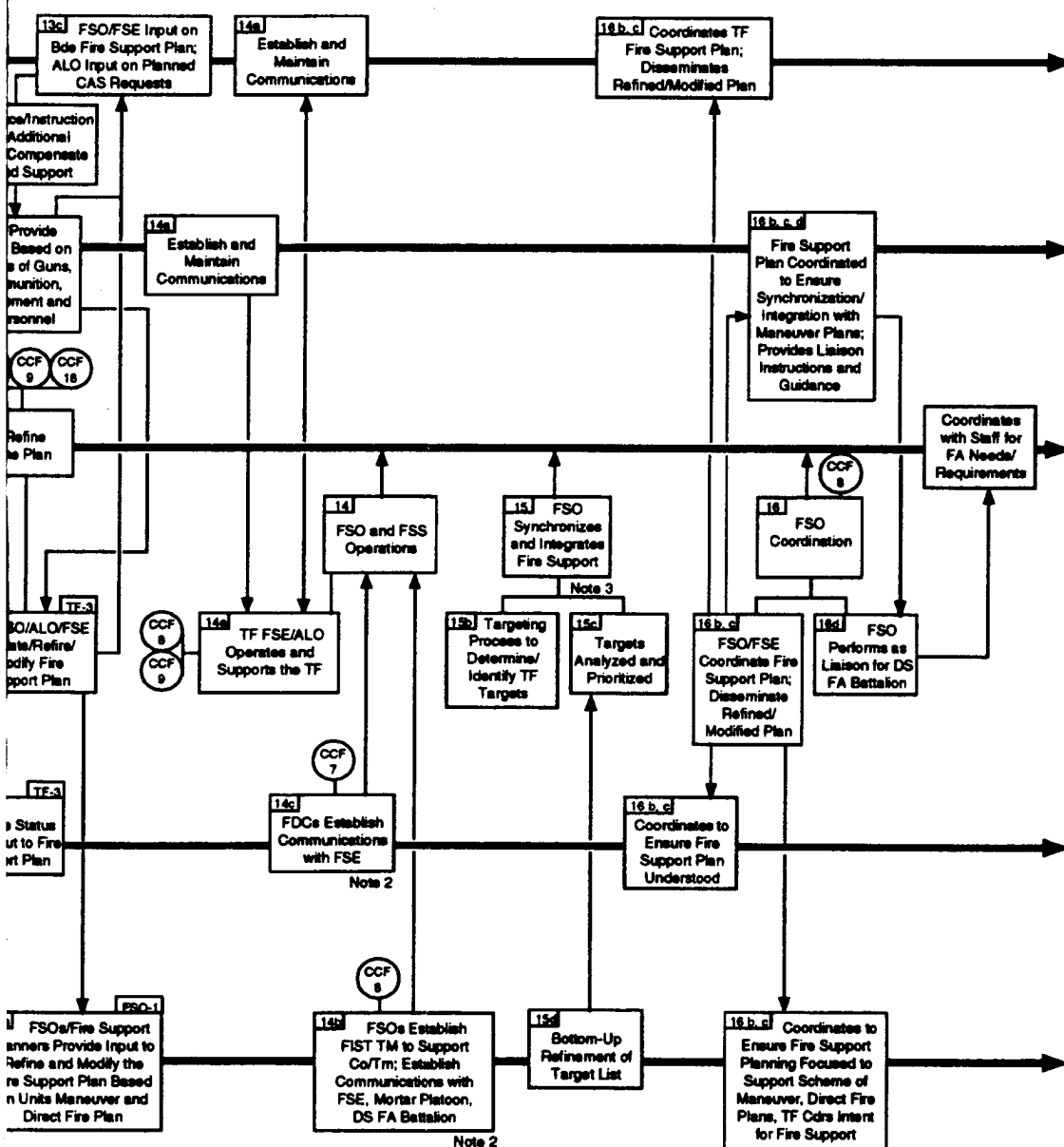
Note 3: The Fire Support Plan is synchronized and integrated with the scheme of maneuver and the timing of the attack.

TASK FLOW PLAN (Concluded)

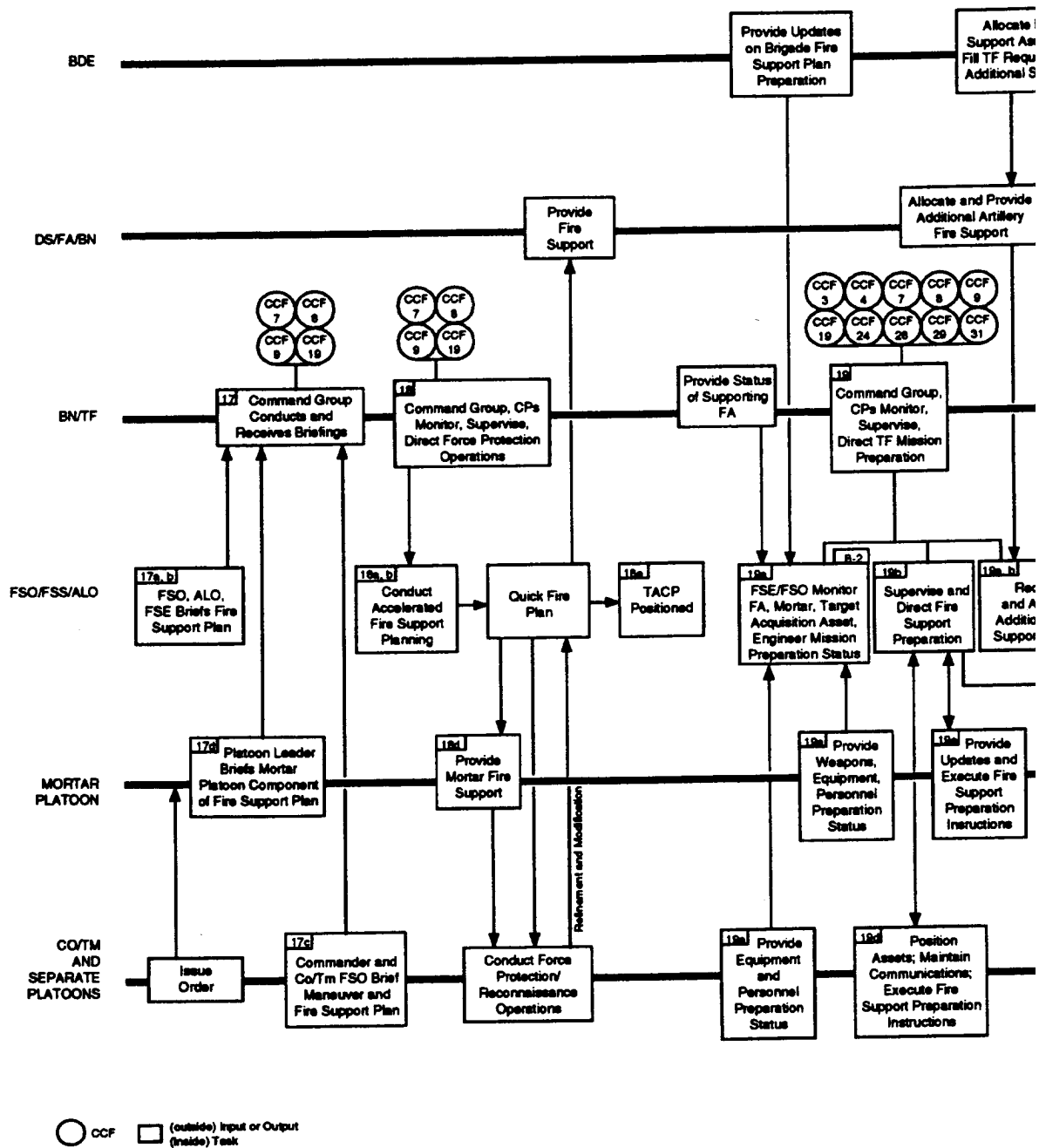


Co/Tm FIST HQ is established early in the planning process; operational since the last mission.
 Support Plan is synchronized and integrated with the scheme of maneuver and direct fire plan as soon as planning commences.

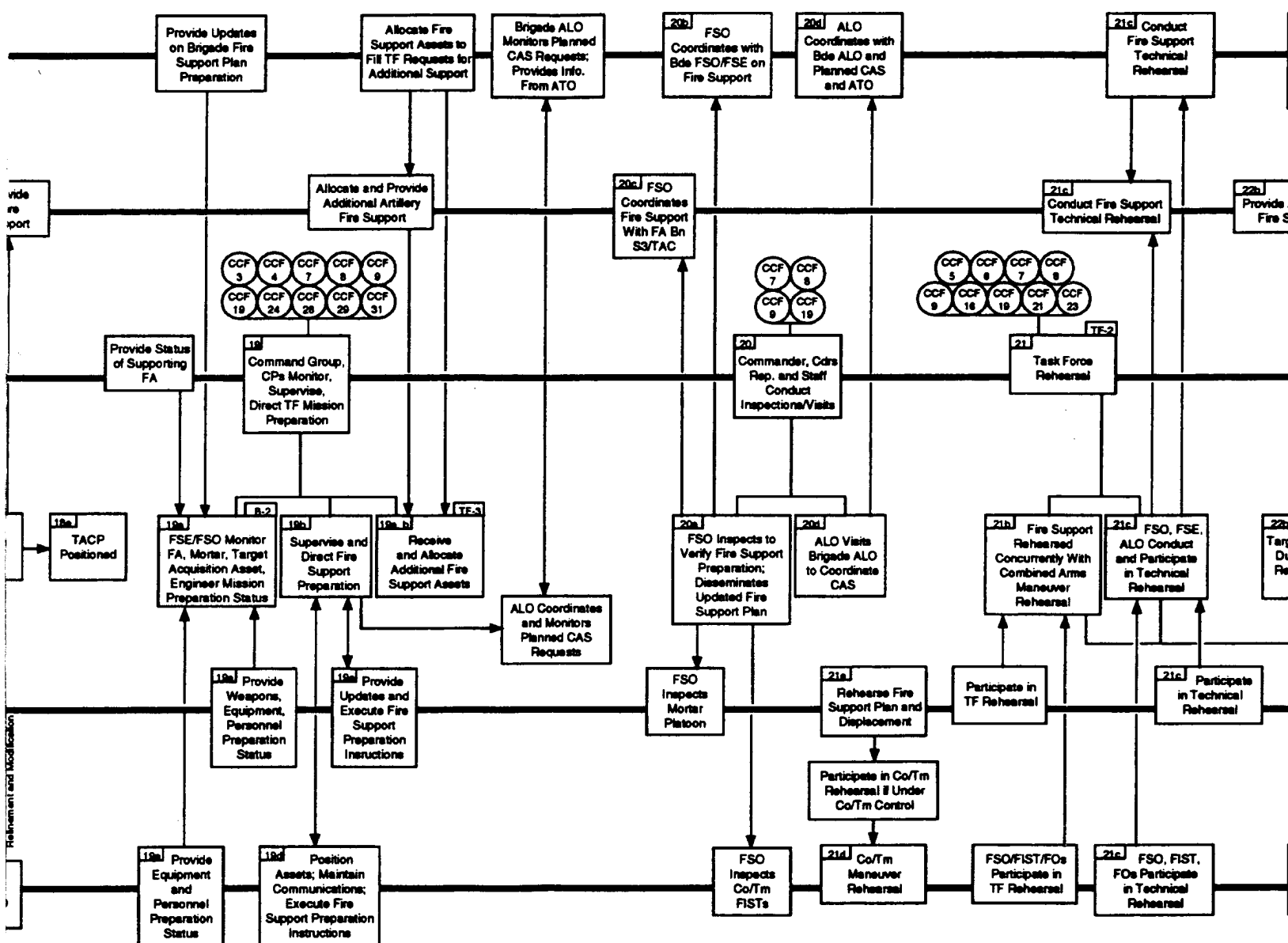
CCF 15 — Coordinate, Synchronize and Integrate Fire Support



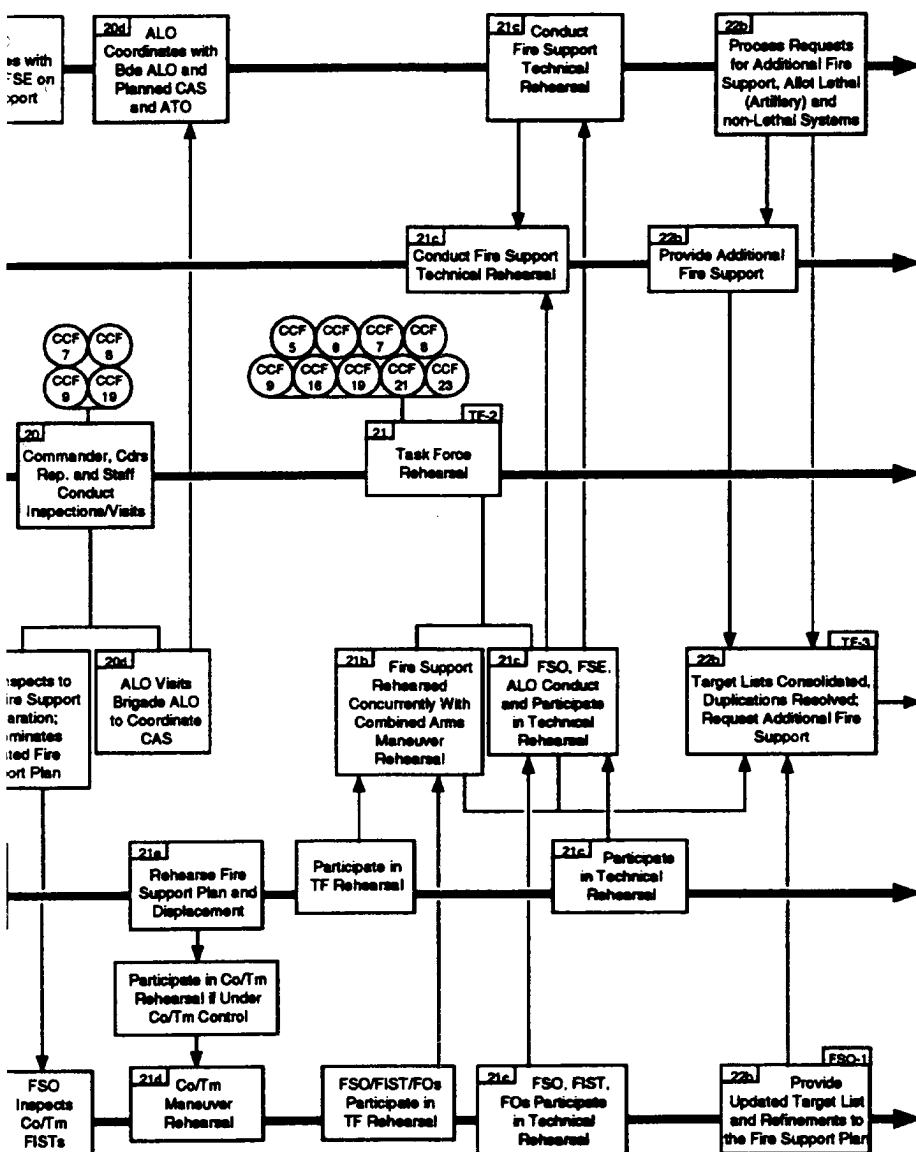
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TASK FLOW PREPARE

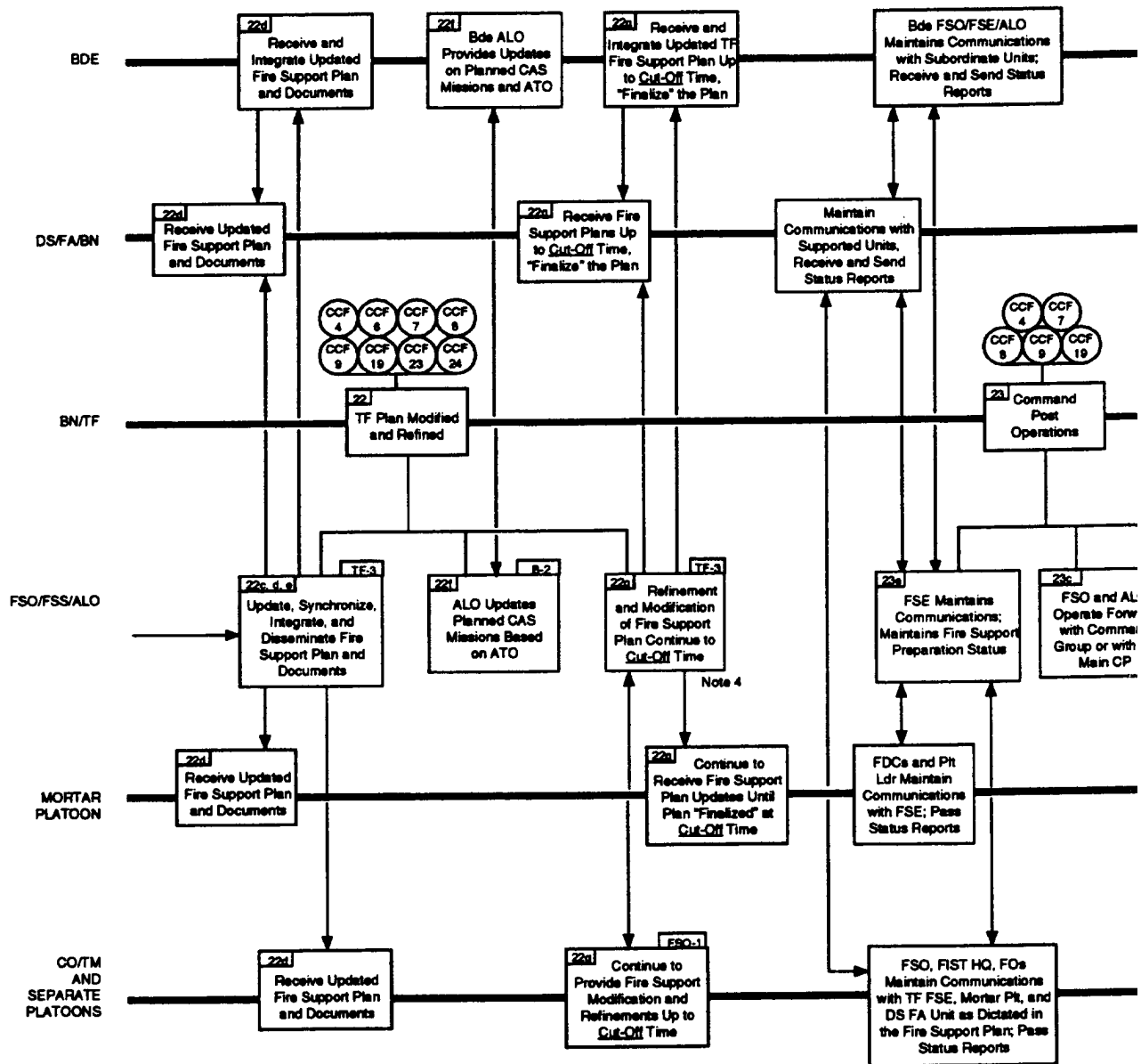


CCF 15 — Coordinate, Synchronize and Integrate Fire Support



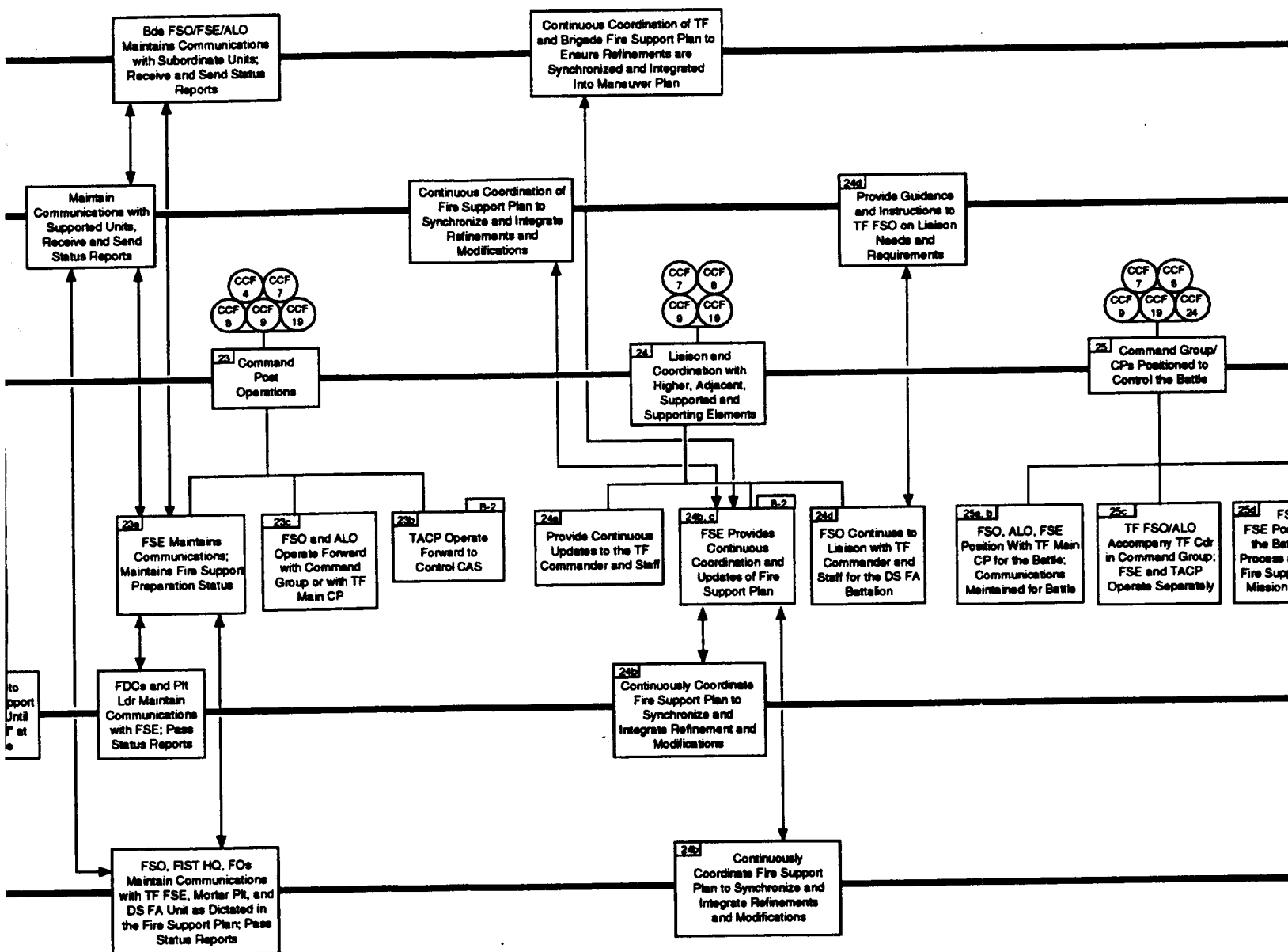
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TASK F PREPARE (C)



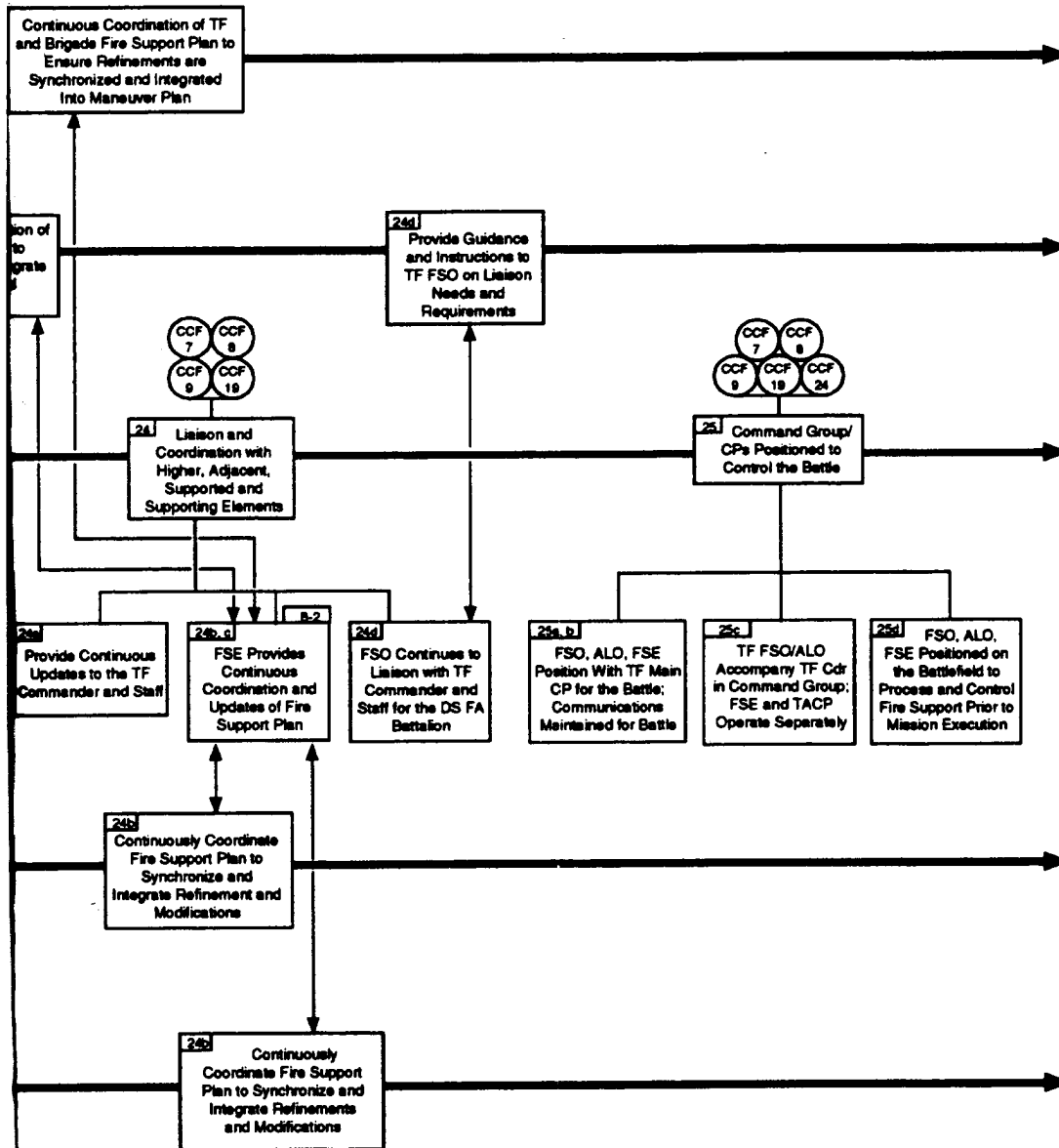
Note 4: The Cut-Off time, determined by the TF FSO, is set prior to mission execution time. Refinements and modifications are ideally completed by the Cut-Off time to allow the updates to be completed and processed. The cut-off time is controlled by the TF Cdr and FSO to ensure that at mission execution time a "Finalized" fire support plan is in place.

TASK FLOW PREPARE (Continued)

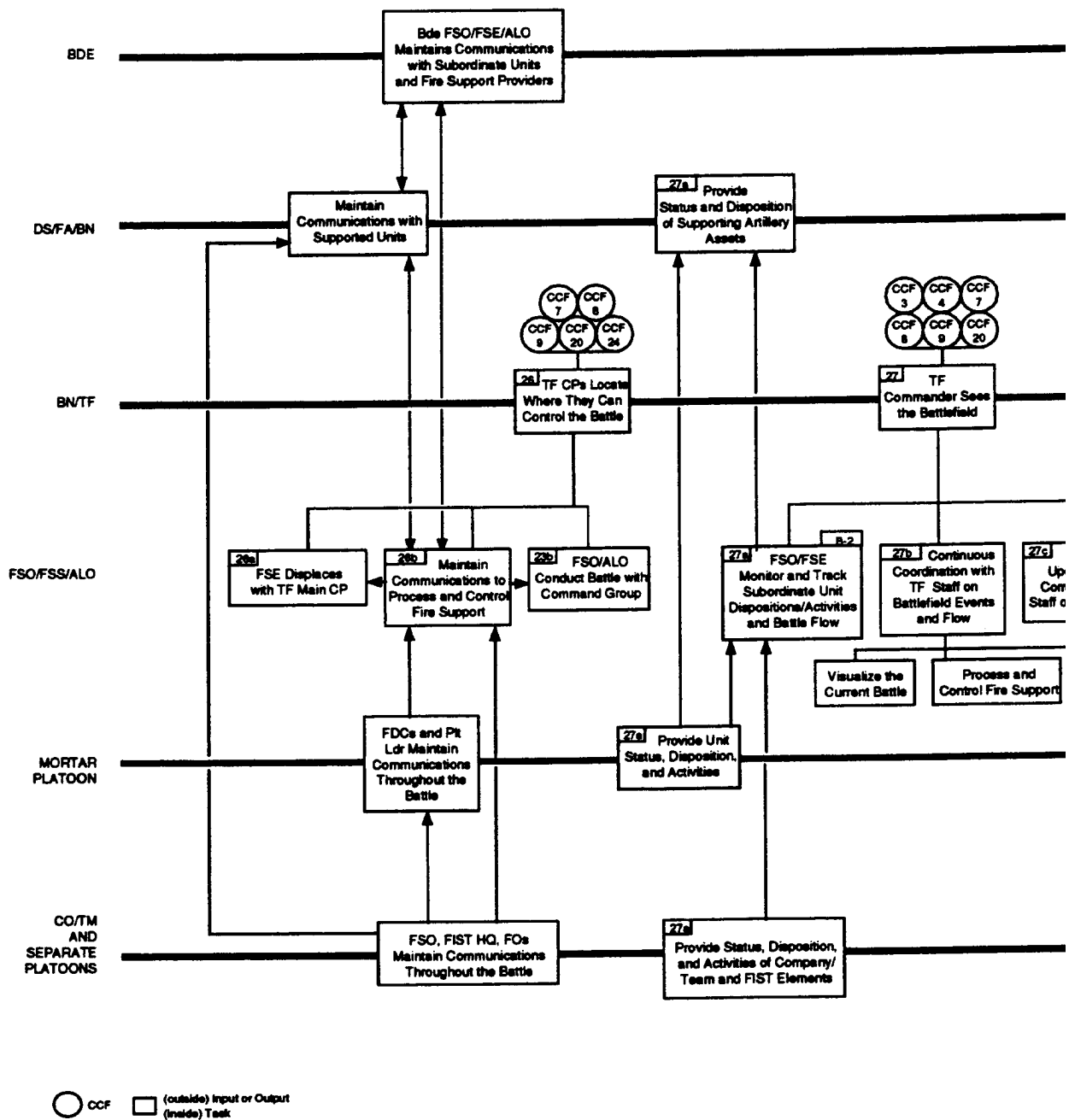


FSO, is set prior to mission execution time. Refinements and modifications to the fire support plan are made during the mission execution time. The cut-off time allows the FSO to ensure that at mission execution time a "Finalized" fire support plan is approved the Cut-Off time.

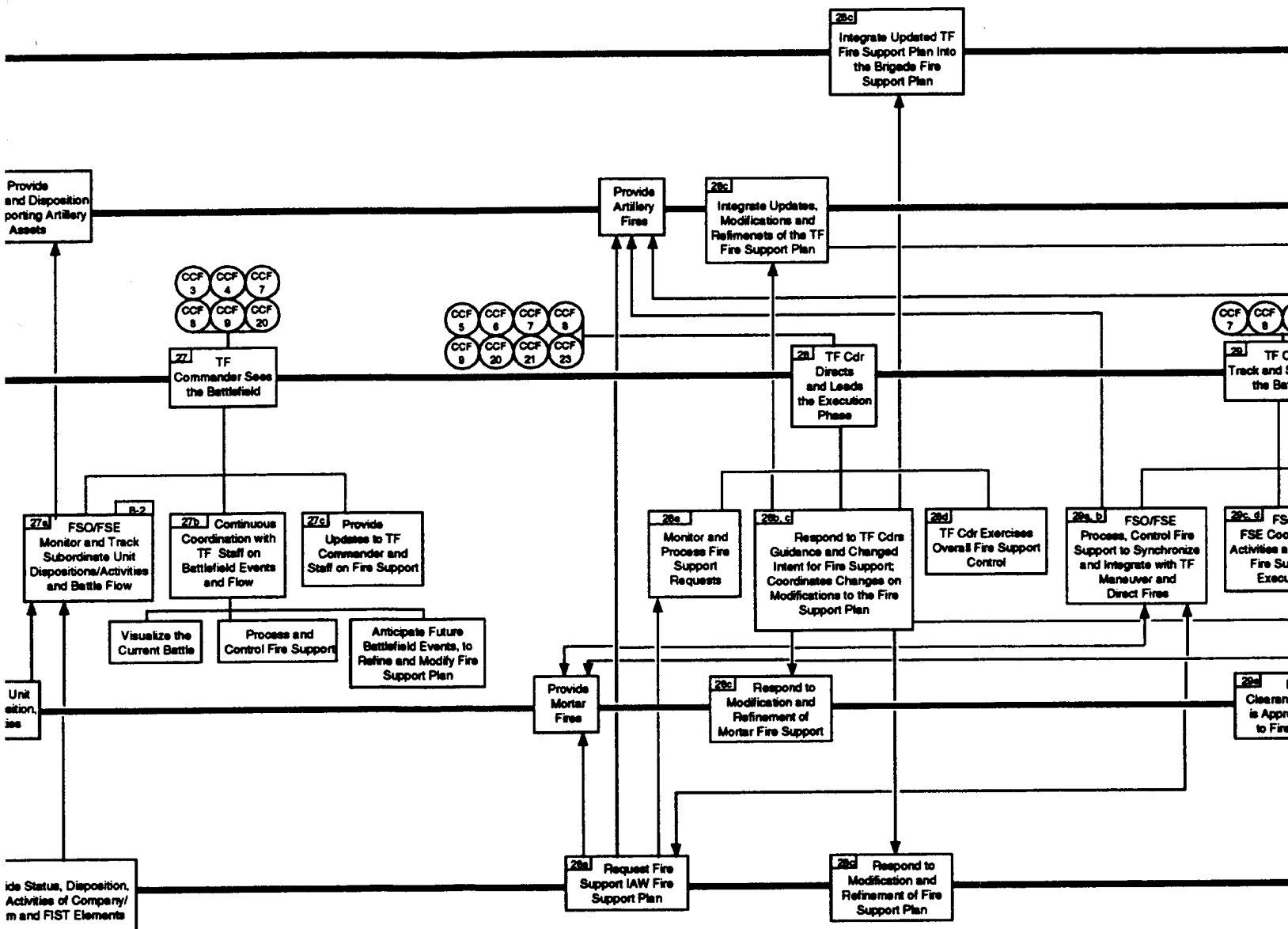
CCF 15 — Coordinate, Synchronize and Integrate Fire Support



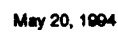
May 20, 1994

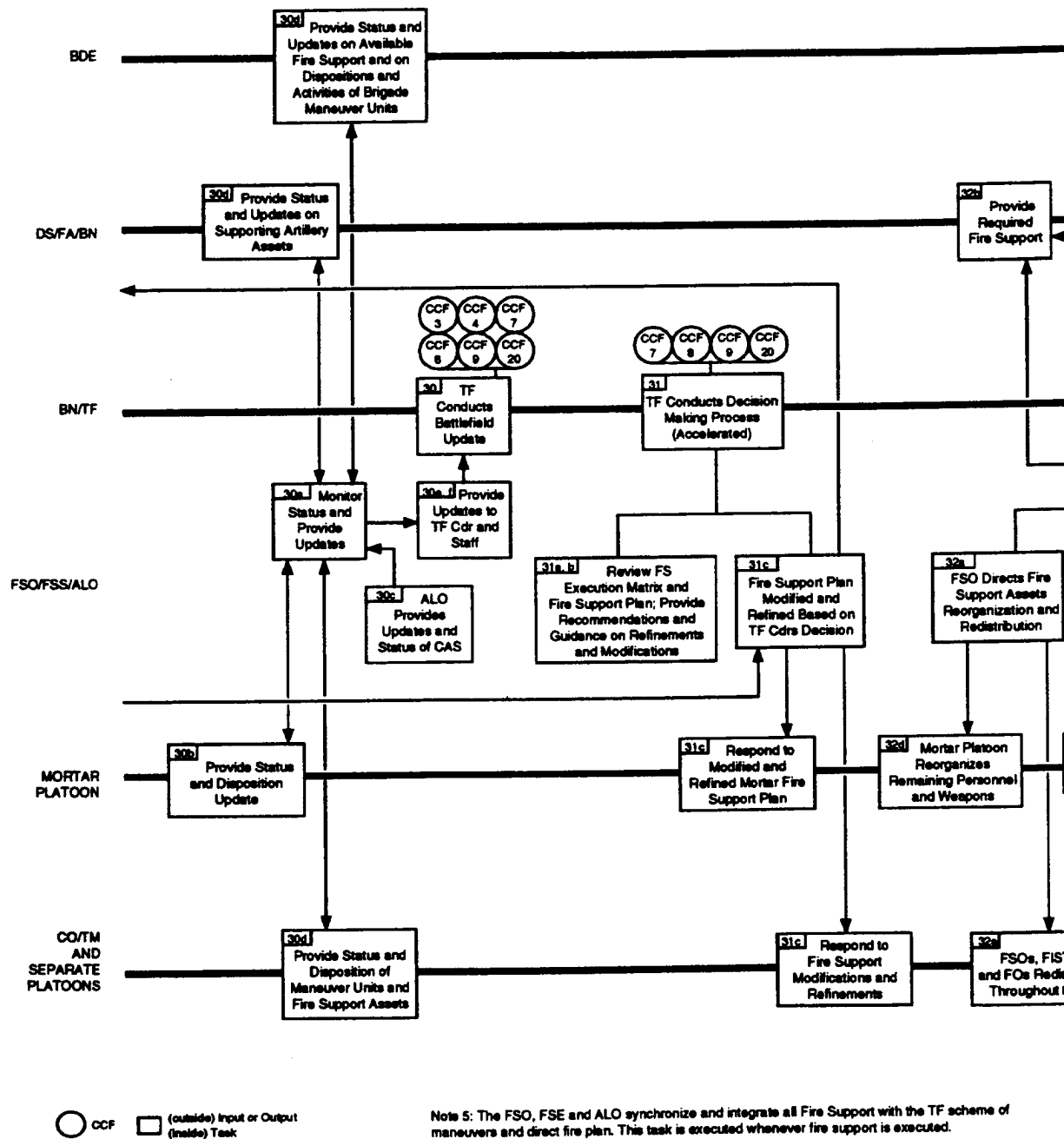


TASK FLOW EXECUTE



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JTE**



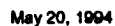


Note 5: The FSO, FSE and ALO synchronize and integrate all Fire Support with the TF scheme of maneuvers and direct fire plan. This task is executed whenever fire support is executed.



FSE and ALO synchronize and integrate all Fire Support with the TF scheme of rect fire plan. This task is executed whenever fire support is executed.

OW
(continued)



OTHER CCF WHICH INTERACT WITH CCF 15

CCF #	TITLE	LOGIC
CCF 3	Process Information	Fire support planners are integrated into information processing system to refine and modify the indirect fire support plan.
CCF 4	Disseminate Intelligence	Updated enemy situation analyzed to modify and refine fire support plan and provide responsive indirect fires as needed.
CCF 5	Conduct Tactical Movement	Supporting indirect fires are integrated and utilized to support TF movement; fire support assets are positioned to call for, process, and control indirect fire support.
CCF 6	Engage Enemy with Direct Fire and Maneuver	Indirect fire support assets under TF control (FSE, FIST-Vs, COLTs, FOs, ground TACP, Mortar Platoon) are positioned to provide indirect fires; indirect fires are requested, processed, and controlled to ensure integration and synchronization with TF maneuver and direct fires.
CCF 7	Employ Mortars	Source of fire support, to be integrated and synchronized with TF maneuver and direct fires.
CCF 8	Employ Field Artillery	Source of fire support, to be integrated and synchronized with TF maneuver and direct fires.
CCF 9	Employ Close Air Support	Source of fire support, to be integrated and synchronized with TF maneuver and direct fires.
CCF 16	Take Active Air Defense Measures	Indirect fires and fire support assets are employed and positioned to bring fires against known or suspected enemy attack helicopters.
CCF 18	Plan for Combat Operations	Fire support assets and indirect fires are integrated and synchronized with the TF maneuver plan, direct fire plan, and TF commander's intent.
CCF 19	Direct and Lead Unit During Preparation for the Battle	Indirect fire support assets under TF control are positioned and rehearsed; indirect fire support plan is modified and refined based on rehearsals, intelligence, and changes to the maneuver and direct fire plan. Indirect fires and assets which process and control indirect fire support are utilized to support security operations.

CCF 15 — Coordinate, Synchronize and Integrate Fire Support

CCF #	TITLE	LOGIC
CCF 20	Direct and Lead Units in Execution of Battle	Indirect fires and fire support assets are integrated and synchronized with the TF maneuver and direct fires through positive command and control.
CCF 21	Overcome Obstacles	Indirect fire support assets under TF control are positioned to provide, process, and control indirect fires; indirect fires are used to obscure TF breaching activities and against enemy positions or forces securing obstacles.
CCF 23	Provide Countermobility	Scatterable mines delivered by fire support assets (Air Force GATOR scatterable mines, and FASCAM) are integrated into fire support planning and preparation; supporting fire support assets (FIST-V, COLTs, FOs, TACPs) are positioned to process and control scatterable mines fires.
CCF 24	Enhance Physical Security	Indirect fire support assets under TF control are included in the planning and construction of defensive positions.
CCF 25	Provide Operations Security	Indirect fires and assets under TF control which process and control fire support are provided to support security operations; positioning of indirect fire systems (mortars, artillery) and fire support assets which process and control indirect fires are conducted in such a way to deny the enemy information on friendly forces plans and intentions.
CCF 29	Conduct Supply Operations	Continuous responsive resupply of TF controlled fire support assets; resupply of ammunition (by mix and type of munitions) for TF mortar platoon.
CCF 30	Provide Personnel Services	Fill shortages of trained key fire support personnel losses (e.g., FSOs, FISTs, TACPs).
CCF 31	Maintain Weapons Systems and Equipment	Repair/replace fire support and specific mission essential equipment (e.g., FIST-Vs, COLTs, TACPs, digital and voice communications equipment, etc.)
CCF 33	Treat and Evacuate Battlefield Casualties	Support of fire support assets under TF control not habitually provided with attached medical assets.

CCF 15 KEY PARTICIPANTS BY TASK

<u>TASKS</u>	<u>KEY PARTICIPANTS</u>
Planning	
1. Direct and lead the task force during planning for the battle	TF Cdr, S3, S2, FSO, ALO, Co/Tm Cdrs, Co/Tm FSOs, Scout Plt Ldr, Mortar Plt Ldr
2. Receive ORDER from higher headquarters	TF Cdr, S3, FSO
3. Conduct mission analysis	TF Cdr, S3, FSO, S2, ALO, Engineer
4. Issue the Warning Order	TF Cdr, S3, FSO, Co/Tm FSOs
5. Commander issues guidance	TF Cdr, S3, S2, FSO, Engineer, ALO
6. Prepare staff estimates	TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer, Signal Officer, CMLO, Air Defense Officer
7. Staff develops courses of action	TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer, Signal Officer, CMLO, Air Defense Officer
8. Staff/Commander analyze courses of action	TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer, Signal Officer, CMLO, Air Defense Officer
9. Staff compares courses of action	TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer, Signal Officer, CMLO, Air Defense Officer
10. Commander announces decision	TF Cdr, XO, S3, FSO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer
11. Staff prepares OPORD/FRAGO	TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Engineer
12. Issue the OPORD/FRAGO	TF Cdr, S3, S2, FSO, ALO, Engineer, Mortar Plt Ldr, Scout Plt Ldr, Signal Officer, CMLO, Air Defense Officer, Co/Tm Cdrs, Co/Tm FSOs
13. Refine the plan	TF S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Engineer, Co/Tm FSOs
14. FSO and Fire Support Section (FSS) Operations	TF S2, Engineer, FSO, FS NCO, ALO, Mortar Plt Ldr, Brigade FSO/FSE, DS FA battalion S3, Brigade ALO, Co/Tm FSOs
15. FSO synchronizes and integrates fire support	TF S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Brigade FSO/FSE, Brigade ALO, DS FA battalion S3, Co/Tm FSOs

TASKS

KEY PARTICIPANTS

16. FSO coordinates fire support

TF S3, FSO/FSE, ALO, Brigade FSO/FSE, Brigade ALO, DS FA battalion S3, Co/Tm FSOs, adjacent unit FSEs

Preparation

17. Command Group Conducts and Receives Briefings

TF Cdr, XO, CSM, S3, FSO, ALO, Mortar Plt Ldr, Co/Tm Cdrs, Co/Tm FSOs

18. Command Group and Command Posts Monitor, Supervise, and Direct Execution of Force Protection Operations and Activities

TF Cdr, S3, S2, FSO, ALO, Mortar Plt Ldr, Scout Plt Ldr, Co/Tm Cdrs, Co/Tm FSOs, Engineer Officer

19. Command Group and Command Posts Monitor, Supervise, and Direct TF Mission Preparation

TF Cdr, S3, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Engineer Officer

20. Commander, Commander's Representatives, and Staff conduct inspections and visits

TF Cdr, S3, FSO, ALO, Mortar Plt Ldr, Co/Tm Cdrs, Co/Tm FSOs

21. Task Force Rehearsals

TF Cdr, XO, S3, FSO, ALO, Mortar Plt Ldr, Scout Plt Ldr, Engineer Officer, Air Defense Officer, Signal Officer, S4, Co/Tm Cdrs, Co/Tm FSOs, Brigade FSO, DS FA battalion S3

22. Task Force Plan Modified and Refined

TF XO, S3, S2, FSO, FS NCO, ALO, Mortar Plt Ldr, Engineer Officer, Co/Tm FSOs

23. Command Post (TAC, TOC, CTCP) Operations

TF S3, S3 NCOIC, FSO, FS NCO, ALO/TACP, Mortar Plt Ldr, Engineer Officer, Brigade FSO/FSE, DS FA battalion TOC, adjacent unit CPs

24. Liaison and coordination with higher, adjacent, supported and supporting elements

TF S3, FSO, FSE, ALO, TACP, Brigade FSO/FSE, Brigade ALO, DS FA battalion S3, adjacent unit FSO/FSEs

25. Command Group and Command Posts Position to Control the Battle

TF Cdr, XO, S3, FSO, FS NCO, Signal Officer, ALO/TACP

Execution

26. TF Command Posts located where they can control the battle

TF Cdr, XO, S3, FSO, FS NCO, Signal Officer, ALO/TACP

27. TF Commander sees the battlefield

TF Cdr, XO, S3, S2, FSO, Co/Tm Cdrs, Co/Tm FSOs, Scout Plt Ldr, Bde FSE/CPs

28. TF Commander directs and leads the execution phase

TF Cdr, XO, S3, FSO, ALO, S1/S4, Mortar Plt Ldr, Co/Tm Cdrs, Co/Tm FSOs

CCF 15 — Coordinate, Synchronize and Integrate Fire Support

TASKS	KEY PARTICIPANTS
29. TF Command Posts track and support the battle	TF XO, S3, S3 NCOIC, FSO, FS NCO, S2, Engineer Officer, S1/S4, Signal Officer, Bde FSE/CPs
30. TF conducts battlefield update (METT-T based)	TF Cdr, XO, S3, S2, FSO, ALO, Mortar Plt Ldr, Scout Plt Ldr, Co/Tm Cdrs, Co/Tm FSOs, Engineer Officer, CMLO
31. TF conducts the decision making process (accelerated)	TF Cdr, XO, S3, S2, FSO
32. TF consolidates and reorganizes	TF Cdr, XO, S3, S2, FSO, ALO, Mortar Plt Ldr, Scout Plt Ldr, Engineer Officer, Co/Tm Cdrs, Co/Tm FSOs, S4, Medical Plt Ldr
33. Execution of synchronized and integrated fire support	TF S3, FSO, FS NCO, ALO, Mortar Plt Ldr, Co/Tm FSOs, Brigade FSO/FSE, Brigade ALO, DS FA battalion S3

**KEY INPUTS AND OUTPUTS TO CCF 15
(W/ CRITICAL INFORMATION)**

KEY INPUTS

TF-1 TACTICAL STANDING OPERATING PROCEDURES (TSOP)

- a. TF movement formations and techniques
- b. Pre-combat checklists
- c. TF obstacle operations (including FASCAM)
- d. FO and FSO duties, responsibilities, and operations
- e. CAS employment

TF-2 TF OPORD

- a. TF Commander's intent and guidance for fire support.
- b. Fire Support Plan, Paragraph 3 (Execution) of OPORD.
- c. Scheme of maneuver from Paragraph 3 (Execution) of OPORD.
- d. TF maneuver graphics/operations overlay.
- e. Fire Support Annex
 - 1) Target list.
 - 2) Fire Support Execution Matrix.
 - 3) Schedule of fires.
 - 4) Priorities of fires.
 - 5) Fire support coordination measures/restrictions.
 - 6) Coordinating instructions.
 - 7) Target acquisition.
 - 8) Artillery task organization.
 - 9) High payoff target list.
 - 10) Attack guidance.
 - 11) Target solution criteria.
 - 12) Quick fire plan.
 - 13) Clearance of fires plan.
 - 14) Positioning plan for COLT, FIST-V, FOs, and TACP.
 - 15) Mortar platoon employment and support.
 - 16) CAS support plan.
- f. Decision Support Template (DST).
- g. Synchronization matrix.
- h. Engineer Annex.
 - 1) Prioritization of obstacles.
 - 2) Brigade directed obstacles.
 - 3) FASCAM targets.
 - 4) Responsibility for emplaced obstacles.
- i. Intelligence Annex.
 - 1) Reconnaissance and surveillance plan.
 - 2) NAIs and TAIs.
 - 3) Intelligence operations/activities in support of the fire support plan.
- j. Air Defense Artillery Annex.
 - 1) SEAD requirements.
 - 2) CAS integration to deconflict artillery fires.

B-1 BRIGADE OPORD

- a. Brigade Commander's intent and guidance for fire support.
- b. Fire Support Plan From Paragraph 3 (Execution) of OPORD.
- c. Scheme of Maneuver for Paragraph 3 (Execution) of OPORD.
- d. Brigade maneuver graphics/operations overlay.
- e. Brigade Fire Support Annex.
 - 1) Priority of fires.
 - 2) Target list.
 - 3) Artillery task organization.
 - 4) Fire support execution matrix.
 - 5) High payoff target list.
 - 6) Attack guidance.
 - 7) Target solution criteria.
 - 8) Fire support coordination measures/restrictions.
 - 9) Quick fire plan.
 - 10) COLT employment plan.
 - 11) Clearance of fires plan.
 - 12) CAS support plan and TACP employment plan.

B-2 BRIGADE TACP, S3 AIR, AND/OR FSE INPUT

- a. Air control measures.
 - 1) Coordinating altitude.
 - 2) High density airspace control zone (HIDACZ).
 - 3) Restricted Operations Zones (ROZ).
 - 4) Airspace Coordination Areas (ACA).
 - 5) Air ingress/egress routes.
 - 6) Contact Points/Initial Points (CP/IP).
 - 7) Helicopter air corridors.
 - 8) Minimum Risk Routes (MRR).
 - 9) Engagement Areas.
- b. Army Aviation activities in AO.
 - 1) Constraints and limitations in altitude and routes.
 - 2) Critical ground locations, such as landing zones, FARPs, battle positions, AOPs.
 - 3) Helicopter area of operations (routes, lift, attack).
- c. Unmanned Air Vehicle areas of operation.
- d. IFF codes.
- e. Air Tasking Order (ATO) information (derived from Corps ASOC information and covering planned and immediate air support requests).
 - 1) Type and number of aircraft.
 - 2) Aircraft arrival time.
 - 3) Length of time aircraft will be on station.
 - 4) Aircraft capabilities (munitions and EW).
 - 5) Projected sortie allocation.
 - 6) Air priority of effort in the AO.
 - 7) Projected suppression coverage (J-SEAD and Weasel).

FA-1 FA BATTALION FIRE SUPPORT PLAN

- a. Produced by FA Battalion in DS to Brigade.
- b. Organization for combat.
- c. FA Battalion positioning plan.

- d. Ammunition restrictions/constraints..
- e. Target acquisition plan.
- f. Schedule of fires.

FSO-1 SUBORDINATE UNITS FIRE SUPPORT PLAN REFINEMENT

- a. Subordinate unit target lists refinements.
- b. Subordinate unit direct fire plans.
- c. Completed obstacle locations.
- d. Smoke and illumination requirements.

KEY OUTPUTS

TF-3 MODIFIED/REFINED FIRE SUPPORT PLAN

- a. Updated TF fire support plan.
 - 1) Priority of fires.
 - 2) Target list.
 - 3) Artillery task organization.
 - 4) Fire support execution matrix.
 - 5) High payoff target list.
 - 6) Attack guidance.
 - 7) Target solution criteria.
 - 8) Schedule of fires.
 - 9) Fire support coordination measures/restrictions.
 - 10) Quick fire plan.
 - 11) Clearance of fires plan.
- b. Updated DST.
- c. Updated FASCAM plan.
- d. FO/FIST/COLT positioning plan updated.
- e. Updated CAS support plan and ground TACP employment plan.

TASK LIST SUMMARY FOR CCF 15

CCF 18 (Plan for Combat Operations), 19 (Direct and Lead Units During Preparation for Battle), and 20 (Direct and Lead Units in Execution of Battle) have been integrated into this task analysis. Tasks 1-13 are CCF 18 tasks; Tasks 17-25 are CCF 19 tasks; and Tasks 26-32 are CCF 20 Tasks. Tasks relevant to COORDINATE, SYNCHRONIZE, AND INTEGRATE FIELD ARTILLERY have been included into the CCF 18, 19, and 20 Tasks. Task and subtask titles have been taken directly from an MTP task or subtask; or, are derived from portions of subtasks, implied Tasks, or requirements outlined in MTPs, appropriate FMs, or other related doctrinal publications.

- | | |
|-----------------|--|
| PLANNING | <ol style="list-style-type: none"> 1. Direct and lead the task force during planning for the battle (ARTEP 6-115-20-MTP, Tasks 06-3-02-1390; ARTEP 7-90-MTP, Tasks 7-3/4-1227; ARTEP 71-2-MTP, Tasks 7-1-3904/5, 3904/6, 3905/2, 3905/4, 3907; FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 71-123, Chap 2) 2. Receive ORDER from higher headquarters (ARTEP 71-2-MTP, Task 7-1-3901; FM 71-123, Chap 1; FM 101-5, Chap 4) 3. Conduct mission analysis (ARTEP 71-2-MTP, Task 7-1-3901/2; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Chap 2; FM 71-123, Chap 1, 7; FM 101-5, Chap 4) 4. Issue the Warning Order (ARTEP 71-2-MTP, Task 7-1-3901/1; FM 71-2, Chap 2; FM 71-123, Chap 1; FM 101-5, Chap 4) 5. Commander issues guidance (ARTEP 71-2-MTP, Task 7-1-3901/2; FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 101-5, Chap 4) 6. Prepare staff estimates (ARTEP 6-115-20-MTP, Tasks 06-3-02-1300, 1390; ARTEP 71-2-MTP, Tasks 7-1-3901/3, 3908/1-4, 3907/2; FM 6-20-20, Chap 3; FM 6-20-40, Chap 2; FM 101-5, Chap 4, Appendix D) 7. Staff develops courses of action (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1380/1; ARTEP 71-2-MTP, Task 7-1-3901/4, 3908/3; FM 6-20-20, Chaps 1, 3; FM 71-123, Chap 7; FM 101-5, Chap 4) 8. Staff/Commander analyze courses of action (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1380/1; ARTEP 71-2-MTP, Task 7-1-3901/4; FM 6-20-20, Chaps 1, 3; FM 101-5, Chap 4) 9. Staff compares courses of action (ARTEP 71-2-MTP, Task 7-1-3901/4; FM 101-5, Chap 4) 10. Commander announces decision (FM 101-5, Chap 4) 11. Staff prepares OPORD/FRAGO (ARTEP 6-115-20-MTP, Task 06-3-02-1360, 1380, 1390; ARTEP 71-2-MTP, Task 7-1-3901/5, 3907/1, 3907/2, 3908/4; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Appendix G; FM 101-5, Chap 4) |
|-----------------|--|

12. **Issue the OPORD/FRAGO** (ARTEP 6-115-20-MTP, Task 06-3-02-1380/4; ARTEP 71-2-MTP, Task 7-1-3901/7, 3904/11; FM 6-20-20, Chap 5; FM 71-123, Chap 1; FM 101-5, Chap 4)
13. **Refine the plan** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; ARTEP 71-2-MTP, Task 7-1-3901/8; FM 6-20-20, Chap 3; FM 101-5, Chap 4).
14. **FSO and Fire Support Section (FSS) Operations** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1390, 1500; ARTEP 71-2-MTP, Task 7-1-3908; FM 6-20-20, Chap 3; FM 6-20-40, Chap 1)
15. **FSO synchronizes and integrates fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1390, 1500; ARTEP 71-2-MTP, Task 7-1-3908; FM 6-20-20, Chap 1; FM 6-20-40, Chap 1)
16. **FSO coordinates fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1330, 1380, 1390, 1540; ARTEP 71-2-MTP, Task 7-1-3907/3, 3908/5; FM 6-20-20, Chap 3; FM 6-20-40, Chap 2; FM 71-123, Chap 7)

PREPARATION

17. **Command Group Conducts and Receives Briefings** (ARTEP 6-115-20-MTP, Task 06-3-02-1380/2; ARTEP 71-2-MTP, Task 7-1-3903/2, 3908/1; FM 6-20-20, Chap 5; FM 71-2, Chap 2; FM 71-123, Chap 2; FM 101-5, Chap 4, Appendix M)
18. **Command Group and Command Posts Monitor, Supervise, and Direct Execution of Force Protection Operations and Activities** (ARTEP 6-115-20-MTP, Task 06-3-02-1390; ARTEP 71-2-MTP, Tasks 7-1-3904/5, 3904/6, 3905/2, 3905/4; FM 6-20-40, Chap 1; FM 6-20-40, Chap 2; FM 71-123, Chap 2)
19. **Command Group and Command Posts Monitor, Supervise, and Direct TF Mission Preparation** (ARTEP 6-115-20-MTP, Task 06-3-02-1390; ARTEP 71-2-MTP, Task 7-1-3001/5, 3901/9, 3901/10, 3904/12; FM 6-20-20, Chap 3; FM 71-123, Chap 2)
20. **Commander, Commander's Representatives, and Staff conduct Inspections and visits** (ARTEP 71-2-MTP, Task 7-1-3903/2; FM 71-2, Chap 2; FM 71-123, Chap 2)
21. **Task Force Rehearsals** (FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 71-2, Chap 2; FM 71-123, Chap 2; FM 101-5, Appendix M)
22. **Task Force Plan Modified and Refined** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; ARTEP 71-2-MTP, Task 7-1-3908/5, 3901/8, 3904/12; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Chap 2; FM 71-2, Chap 2)
23. **Command Post (TAC, TOC, CTCP) Operations** (ARTEP 6-115-20, Task 06-3-02-1300/2; ARTEP 71-2-MTP, Task 7-1-3904; FM 6-20-20, Chap 3)

- 24. **Liaison and coordination with higher, adjacent, supported and supporting elements** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1330; ARTEP 71-2-MTP, Task 7-1-3901/8, 3907/3, 3902/10; FM 6-20-20, Chaps 1, 2, 3)
- 25. **Command Group and Command Posts Position to Control the Battle** (ARTEP 71-2-MTP, Task 7-1-3901/11; FM 6-20-20, Chap 3)

EXECUTION

- 26. **TF Command Posts located where they can control the battle** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/2; ARTEP 71-2-MTP, Task 7-1-3901/11, 3903/1; FM 6-20-20, Chap 3)
- 27. **TF Commander sees the battlefield** (ARTEP 71-2-MTP, Tasks 7-1-3901/11; FM 71-100, Chap 1)
- 28. **TF Commander directs and leads the execution phase** (ARTEP 71-2-MTP, Task 7-1-3901/12, 3903/4, 3903/5; FM 71-100, Chap 1)
- 29. **TF Command Posts track and support the battle** (ARTEP 71-2-MTP, Task 7-1-3903/3, 3904/14; FM 6-20-20, Chap 3, 4; FM 71-123, Chap 1)
- 30. **TF conducts battlefield update (METT-T based)** (ARTEP 6-115-20-MTP, Tasks 06-3-02-1300/4, 1330/3, 1500/3; ARTEP 71-2-MTP, task 3902/3; FM 6-20-20, Chap 3)
- 31. **TF conducts the decision making process (accelerated)** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; FM 6-20-20, Chap 3; FM 71-123, Chap 1)
- 32. **TF consolidates and reorganizes** (ARTEP 71-2-MTP, Task 7-1-3022/2, 3023, 3907/4, 3908/4)
- 33. **Execution of synchronized and integrated fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1360, 1370, 1390/2, 1390/3, 1420, 1500/3, 1550, 1560, 1580; ARTEP 71-2-MTP, Task 7-1-3901/12, 3901/15, 3903/5, 3907, 3908; FM 6-20-20, Chaps 1, 2, 3; FM 71-123, Chap 7)

COORDINATE, SYNCHRONIZE AND INTEGRATE FIRE SUPPORT PLANNING TASK LIST

CCF 18 (Plan for Combat Operations) tasks have been integrated into this task analysis because it reflects command and control aspects of the planning process. The 13 CCF 18 Planning Tasks are numbered as tasks 1-13 in this analysis planning task list. This analysis also includes key planning tasks from CCF 7 (Employ Mortars), CCF 8 (Employ Field Artillery), and CCF 9 (Employ Close Air Support) that must be synchronized and integrated to support the TF scheme of maneuver and direct fire plan. Subtasks included under each of the 13 tasks reflect those actions or events which are critical to Coordinate, Synchronize, and Integrate Fire Support. Tasks 14, 15, and 16 are specific tasks performed by fire support personnel/elements (FSO, FSE, TACP, Mortar Platoon) which are critical to this task analysis.

1. **Direct and lead the task force during planning for the battle** (ARTEP 6-115-20-MTP, Task 06-3-02-1390; ARTEP 7-90-MTP, Task 7-3/4-1227; ARTEP 71-2-MTP, Task 7-1-3904/5, 3904/6, 3905/2, 3905/4, 3907; FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 71-123, Chap 2)

NOTE: Accelerated fire support planning is dependent on the time available. In the context of conducting accelerated fire support planning for the security force, time will be limited to ensure the security force can rapidly occupy its assigned positions. The Informal fire support planning process is used to produce the fire support plan. The previous missions fire support plan may still be valid for the employment of fires while the TF is conducting mission planning.

- a. Accelerated fire support planning for the Quick Fire Plan.
 - 1) The TF FSO initiates the Quick Fire plan by developing a target list and assigning target numbers to them.
 - 2) The TF FSO assigns targets, and possibly a schedule of fires, to the most appropriate fire support means available. The FSO disseminates the target list and schedule to all appropriate fire support agencies (Brigade FSE, DS FA battalion, and mortar platoon).
 - 3) The Security Force or company/team FSO refines and modifies the target list to support the mission. Refinements and modifications are forwarded to the TF FSO for external coordination and refinement of the TF fire support plan.
 - 4) Fire support plan integrates mortars, artillery, and CAS with the security forces direct fire plan.
 - 5) Security force provided with priority of fire support.
- b. FSO includes in the WARNO/FRAGO task organization changes, as required, to supplement the security force with additional fire support assets (COLTs, FIST-Vs, FOs, and TACP).
- c. TF security and intelligence operations (reconnaissance, surveillance, counter-reconnaissance).

- 1) FSO, FSE, Mortar Platoon and TACP are prepared to process and control indirect fires in support of security fight and in support of reconnaissance and surveillance forces.
 - a) Mortar platoon FDC is operational, has the fire support plan, and is prepared to process fire support requests. Mortars are positioned, with ammunition available, and prepared to fire requested missions.
 - b) ALO positions TACP forward as required to coordinate and control CAS missions in support of security force operations.
 - 2) FSO monitors requests for fire support, matching the weapons system (artillery, mortars, CAS) against the threat and urgency of need.
 - 3) Fire support planning includes fires in support of RACO and rear area security requirements.
 - d. See CCF 5; CCF 6; CCF 7, Task 1; CCF 8, Task 1, CCF 9, Task 1; and CCF 18, Task 1; CCF 25.
2. **Receive ORDER from higher headquarters** (ARTEP 71-2-MTP, Task 7-1-3901; FM 71-123, Chap 1; FM 101-5, Chap 4)
- a. FSO accompanies TF commander to higher HQs during orders issue.
 - b. FSO coordinates with Brigade FSO, DS FA battalion S-3, and Brigade ALO to identify and determine artillery and CAS availability.
 - c. ALO coordinates with the Brigade ALO on ATO guidance and planned CAS.
 - d. See CCF 7; CCF 8, Task 2; CCF 9, Task 2; and CCF 18, Task 2.
3. **Conduct mission analysis** (ARTEP 71-2-MTP, Task 7-1-3901/2; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Chap 2; FM 71-123, Chap 1, 7; FM 101-5, Chap 4)

NOTE: Deliberate fire planning begins immediately after receipt of the higher headquarters order; FSOs do not wait for the higher headquarters target lists. Immediately after notification of the mission and coordination with the Brigade FSO/FSE, the FSO alerts subordinate fire support planners of the mission to initiate the bottom-up fire support plan development.

- a. The brigade commander's intent for Fire Support is analyzed by the FSO to determine availability of fire support to the TF and priority of fires for the TF.
- b. TF ALO conducts analysis to determine CAS requirements and identify projected sorties as outlined in the ATO.
- c. FSO initiates fire support planning and coordination in support of mission analysis.
 - 1) Identify limitations in available artillery support as specified in the brigade order, the FA battalion Fire Support Plan, and results of coordination with the brigade FSO.
 - 2) Identify artillery requirements to support the TFs implied, specified and essential mission tasks.

- 3) Identify capability of Mortar Platoon to support the mission through coordination with the Mortar Platoon Leader.
 - 4) Identify CAS requirements to support the mission through coordination with the TF ALO.
 - 5) Determine fire support requirements in support of rear area operations.
 - 6) Integration of all indirect fire support assets (artillery, mortars, and CAS) is begun immediately at the onset of planning.
- d. FSO provides assistance and input as required to TF commander for development of Commander's intent for fire support.
- e. Review previous fire support plan for applicability.
- f. See CCF 7, Task 3; CCF 8, Task 3; CCF 9, Task 3; and CCF 18, Task 3.
4. **Issue the Warning Order** (ARTEP 71-2-MTP, Task 7-1-3901/1; FM 71-2, Chap 2; FM 71-123, Chap 1; FM 101-5, Chap 4)
 - a. The TF Warno may include fire support information if the fire support plan is changed or modified.
 - b. The FSO provides Warno input to include:
 - 1) Changes to artillery and mortar support.
 - 2) Task organization changes of TF controlled fire support assets (FIST-Vs, COLTs, FOs, TACP).
 - 3) Instructions to mortar platoon on security force support, rear area/RACO support, positioning during planning and preparation phases.
 - c. TACP, Mortar Platoon, and fire support elements are alerted of impending mission.
 - d. See CCF 7, Task 4; CCF 8, Task 4; CCF 9, Task 4; and CCF 18, Task 4.
5. **Commander Issues guidance** (ARTEP 71-2-MTP, Task 7-1-3901/2; FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 101-5, Chap 4)

NOTE: The TF commander "owns" the fire support plan. He provides specific guidance to the fire support planners which will guide the integration of fire support into the scheme of maneuver.

- a. Guidance includes the restated mission, brigade commander's intent, staff planning guidance, concept of the operation, and scheme of maneuver. This information, including the TF commanders intent, serve as the focus for the fire support plan.
- b. The FSO bases the fire support plan on how the TFs direct fire assets are to be employed so he can supplement, not interfere with, their employment. The process of synchronizing and integrating fire support with the scheme of maneuver is initiated with the issuance of the commander's guidance.

- c. The FSO provides expertise and assistance to the TF commander in the development of the Commander's Intent for Fire Support.
 - d. TF commander's intent for fire support.
 - 1) Prioritizes fire support on the battlefield.
 - 2) Focuses fire support execution at the critical time and place.
 - 3) Allows the FSO to properly integrate and synchronize the fire support system into the overall scheme of maneuver to ensure uninterrupted support.
 - 4) Requirements for the fire support plan must be within the capabilities of resources available.
 - 5) Outlines when and where the commander wants fires and what the commander wants in the way of effects, duration, and timing.
 - 6) Includes use of CAS as a component of fire support.
 - e. Detailed and focused fire support planning commences with the issuance of the commander's guidance. Fire support planning is based on the following critical sets of information:
 - 1) Commander's intent and scheme of maneuver.
 - 2) METT-T, as developed during the preparation of staff estimates (Task 6).
 - 3) Guidance from higher and supporting FA headquarters.
 - f. The FSO ensures that the Intent for Fire Support allows integration with and synchronization to other battlefield operating systems.
 - g. See CCF 7, Task 5; CCF 8, Task 5; CCF 9, Task 5; and CCF 18, Task 5.
6. **Prepare staff estimates** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1390; ARTEP 71-2-MTP, Task 7-1-3901/3, 3908/1-/4, 3907/2; FM 6-20-20, Chap 3; FM 6-20-40, Chap 2; FM 101-5, Chap 4, Appendix D)

NOTE: Normally, the TF will have an ALO available for planning and employment of CAS. In the event that there is no ALO or TACP present, the TF FSO conducts CAS planning. As for the TF mortars, the FSO's doctrinal responsibility is limited to recommending the integration of mortars into the fire support plan. The TF commander may authorize the FSO to exercise control over mortar platoon fire planning and integration into the fire support plan. Regardless of the FSO's authority over the mortar platoon, he includes the mortar platoon as a component of the fire support plan in order to synchronize and integrate the entire fire support package.

- a. FSO initiates his estimate based on the commander's guidance and information outlined in task 5 above.
- b. Information provided by the brigade headquarters FSE is considered when developing the parameters of the fire support plan:
 - 1) Fire support asset allocation and status.

- 2) Commander's target attack guidance.
- 3) Fires in the zone planned by brigade.
- c. FSO considers all available fire support systems (artillery, mortars, CAS) when developing the fire support estimate.
- d. The fire support estimate prepares the FSO to assist in COA development and participation in the wargaming. It serves as the recommendation to the TF commander on how fire support can support and be integrated into the scheme of maneuver and direct fire plan.
- e. FSO determines facts.
 - 1) Determined as outlined in the brigade order and coordination with the Brigade FSO, TACP, and the supporting FA battalion staff. Essential information from the brigade order and coordination are:
 - a) The brigade commander's intent.
 - b) Fire support assets available.
 - c) Fire support coordination measures.
 - d) Target list.
 - e) Constraints on FA Class V consumption, stated in terms of a CSR.
 - 2) Developed through interaction and coordination with the TF staff and subordinate fire support elements.
 - a) With assistance from the TF ALO, determine CAS: availability and employment considerations; weapons systems and munitions effects; number of sorties/day; FAC and ALO status.
 - b) Determine field artillery: organization for combat (DS, GS, GSR support relationship); priority of fires; unit status and capabilities (including FA assets under TF control).
 - c) Determine target acquisition systems status, availability and locations for: FIST, FIST-Vs, COLTs, OH-58Ds, FOs, and Scouts.
 - d) With assistance from the TF ALO, Aviation LNO and Air Defense Officer, determine SEAD requirements: schedules, priority, locations, means available.
 - e) With assistance from the mortar platoon leader, determine: status of systems and carriers; available and required munitions (by quantity and type); task organization requirements (in general support of TF or in DS to a specific unit); and locations (present and anticipated).
 - f) Through coordination with the S2, utilize the IPB to develop initial targeting requirements and fire support missions.
 - g) Determine terrain conditions with the Engineer.

- f. Utilizes METT-T, as developed from the TF staff estimates.
 - g. FSO makes assumptions based on availability of fire support information to fill shortfalls in facts.
 - h. Time dependent, the FSO conducts a reconnaissance of the area of operations. The reconnaissance is conducted to allow the FSO and fire support planners to plan fires based on the physical characteristics of the area of operations instead of having to rely on map-based planning.
 - i. See CCF 7, Task 6; CCF 8, Task 6; CCF 9, Task 6; and CCF 18, Task 6.
7. **Staff develops courses of action** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1380/1; ARTEP 71-2-MTP, Task 7-1-3901/4, 3908/3; FM 6-20-20, Chaps 1, 3; FM 71-123, Chap 7; FM 90-14, Chap 3; FM 101-5, Chap 4)

NOTE: At the TF level, fire support is planned to support the close battle. Indirect fires are used to engage enemy troops, weapons, or positions that pose a threat to the TF. Fire support expands battlefield depth by inflicting damage beyond direct fire range. The TF commander uses fire support to support his scheme of maneuver; to mass firepower; and to delay, disrupt, or destroy enemy forces in depth. The goal of fire support planning is to effectively integrate and synchronize fire support into maneuver battle plans to optimize combat power. Indirect fires are also planned to support the rear area battle.

- a. Mortars, field artillery, and CAS fire support are integrated and synchronized with the scheme of maneuver for each course of action, the reconnaissance and surveillance plan, the obstacle plan, and tasks to subordinate units.
- b. Synchronization of fire support plan to the scheme of maneuver is designed to:
 - 1) Enhance the TF's freedom of maneuver.
 - 2) Supplement and reinforce the direct fire plan.
 - 3) Shape the battlefield through indirect fires by influencing the enemy to respond to the TF maneuver plan, allowing the TF to retain the initiative.
- c. Fire support integration is based on:
 - 1) Using the lowest echelon able to furnish effective support.
 - 2) Using the most effective means to service the target.
 - 3) Avoiding unnecessary duplication (not use more than one weapons system to service a target unless required).
 - 4) Matching weapons systems to the desired target effect (neutralize, suppress, or destroy).
 - 5) Fire support does not negatively impact on the TFs maneuver or direct fires.
- d. The FSO coordinates with the TF staff during COA development to synchronize and integrate fire support.
 - 1) Coordination with the S2:

- a) To plan fires on: known, suspected and likely enemy positions; mounted and dismounted avenues of approach; easily recognizable terrain features. Include fires on enemy ADA systems as a component of the SEAD plan.
 - b) To provide expertise in developing background on enemy fire support capabilities and limitations.
- 2) Coordination with the TF Engineer Officer: to reinforce and supplement obstacles/counter-mobility plan and terrain conditions.
- 3) Coordination with the TF Air Defense Officer: to target enemy attack helicopter positions in support of the air defense plan.
- 4) Coordination with the TF ALO.
 - a) To develop preplanned CAS missions, considers immediate CAS mission requirements, CAS available as outlined in the ATO, and synchronize SEAD requirements.
 - b) If there is no ALO working with the TF, the FSO conducts CAS planning. Planning is conducted through coordination with the Brigade ALO and FSO.
- e. FSO develops a fire support plan for each COA which:
 - 1) Supports the TF commander's Intent for Fire Support.
 - 2) Includes DS, GS, and GSR artillery.
 - 3) Matches weapons systems (mortars, artillery, CAS) to tentative targets/effects and supports TF maneuver and direct fire requirements (e.g., smoke, illumination, and special munitions).
 - 4) Defines methods of target acquisition and positioning requirements for FIST-Vs, COLTs, FOs, TACP, air assets, and backup observers.
 - 5) Provides for positive clearance of fires to eliminate fratricide risks.
 - 6) Includes TF mortars (regardless of the FSOs authority over the mortar platoon, mortar fires are integrated into the fire support plan).
 - 7) Plans for employment of fire support throughout the depth of the TF's area of operations (deep, rear, flank). Develops plans for coordination of attack of targets outside the TF's AO.
 - 8) Develops restrictive fire support coordination measures (RFL, NFAs, ACAs, boundaries) to preclude engagement of friendly forces and to facilitate engagement of enemy forces.
 - 9) Establishes and allocates: priority targets by weapons systems and desired effects; units to receive priority of fires by weapons system; timing of shifts in priorities to the next target or unit; target acquisition systems (FIST-Vs, COLTs, FOs, ground TACP); and back-up shooters for each target or battlefield event which requires fire support.
 - 10) Includes special munitions/missions (e.g., smoke, illumination, FASCAM, copperhead, counter-fires, FPFs).

- 11) Targets are planned on:
 - a) Known, likely, and suspected enemy locations.
 - b) Mounted and dismounted avenues of approach.
 - c) Potential enemy overwatch/support by fire positions.
 - d) Easily recognizable terrain features to allow rapid adjustment onto a target.
 - e) Consolidate target lists from subordinate company/team FSO's, with duplications resolved.
- f. See Task 15 for the targeting process. The fire support plan is based on the employment of fire support assets against targets which will affect and impact on the TF scheme of maneuver.
- g. The FSO and FSE update subordinate FSOs on the status of fire planning. This update may initiate the bottom-up refinement of the fire support plan. Even though the fire support plan is not finalized, subordinate FSOs can utilize the information to begin fire planning at their levels.
- h. Positioning of TF fire support assets consider communications requirements and retrans. Planned locations are determined to allow continuous communications.
- i. Indirect fires and fire support are planned to support the rear battle. Fire support is planned against probable threat Level I and II targets throughout the TF sector. Threat Level III (battalion-sized or larger) fire support planning is conducted concurrently with the Brigade FSE and the DS FA BN. The FSE:
 - 1) Coordinates rear battle plans with subordinate units and staffs.
 - 2) Integrates fire support requirements for bases/base clusters.
 - 3) Plans employment of mortars to support the rear battle; provides recommendations to the Brigade Rear Battle Officer for positioning of supporting artillery.
- j. See CCF 1; CCF 5; CCF 6; CCF 7, Task 7; CCF 8, Task 7; CCF 9, Task 7 and 14; CCF 16; CCF 18, Task 7, and CCF 23.
8. **Staff/Commander analyze courses of action** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1380/1; ARTEP 71-2-MTP, Task 7-1-3901/4; FM 6-20-20, Chaps 1, 3; FM 101-5, Chap 4)
 - a. FSO utilizes Fire Support Estimate and notes taken during COA development to brief fire support for each COA. Notes are maintained on COA discussions for development of the TF order and supporting fire support documents.
 - b. FSO participates in the war-gaming session and provides expertise on integration and synchronization of indirect fires. The FSO provides input for field artillery and mortars. Although the ALO provides expertise on CAS, the FSO is prepared to provide CAS input in the event that the ALO is not available.
 - c. During the wargaming of each COA, the FSO describes the fire support plan covering:

- 1) The attack of emerging targets with the most effective system.
- 2) The tasks and/or requirements for all available fire support assets.
- 3) Distribution of assets for close support of maneuver elements.
- 4) Integration of movement and displacement of indirect fire systems and units to follow the battle flow.
- 5) Integration of the use of fire support coordination measures.
- 6) Identification of high value/high payoff targets and the method to engage them.
- d. The positioning plan for target acquisition assets is developed to support each COA.
 - 1) The placement and employment of targeting assets is a joint responsibility between the S2 and the FSO. The ALO may be involved when considering fixed wing air assets.
 - 2) Target acquisition assets are:
 - a) Remotely employed sensor (REMS and UAV).
 - b) Combat outposts, LP's, OP's, and reconnaissance patrols.
 - c) Ground surveillance radars and weapons-locating radars.
 - d) Target production elements (at the DIVARTY TOC).
 - e) COLT, FIST-V, FOs, TACP.
 - f) OH-58D and Air FACs.
 - g) EPWs, local population, refugees.
 - h) CEWI Bn and DIVARTY assets.
 - i) Aviation assets (fixed and rotary wing).
 - j) Maneuver units.
 - 3) Planning for the employment of target acquisition assets to support each COA is focused on the employment of those assets under TF control or assets which may be available to the TF. If, during the COA analysis, a need is determined for the employment of target acquisition assets not under control of or available to the TF, the FSO requests brigade to provide the support.
- e. Throughout the COA war-gaming, the FSO ensures that the TF commander's Intent for Fire Support is being achieved during each COA analysis.
- f. The FSO verifies task organization, command relationship, and requirements of fire support assets.
- g. Ensures that fire support assets are integrated to achieve the desired battlefield effect (suppression, neutralization, destruction) and are synchronized to support the TF scheme of maneuver and direct fire plan.

- h. The fire support plan utilizes those fire support assets under TF control or supporting the TF (e.g., mortars, DS field artillery, and CAS). If, during the COA analysis, the commander and staff determine that additional fire support assets are required, the FSO identifies the requirement and forwards a request to the Brigade FSO for additional assets.
 - i. See CCF 7, Task 8; CCF 8, Task 8; CCF 9, Task 8; and CCF 18, Task 8.
9. **Staff compares courses of action** (ARTEP 71-2-MTP, Task 7-1-3901/4; FM 101-5, Chap 4)
- a. FSO provides input as developed in Task 8 above.
 - b. FSO is prepared to brief fire support for the recommended COA, as well as other COA's, branches, and sequels analyzed.
 - c. FSO ensures that the TF commander's intent for fire support is achieved in each COA.
 - d. FSO provides assistance in construction of the decision matrix, providing fire support expertise when determining criteria and weighted measurements.
 - e. TACP/ALO participates in COA comparison as a part of the fire support team.
 - f. See CCF 7, Task 9; CCF 8, Task 9; CCF 9, Task 9; and CCF 18, Task 9.
10. **Commander announces decision** (FM 101-5, Chap 4)
- a. FSO briefs the fire support plan as it supports the TF scheme of maneuver and direct fire plan of each COA. The ALO is prepared to brief the CAS support plan for each COA.
 - b. The FSO maintains notes on commander's decision as it affects the employment of fire support and the command/support relationship.
 - c. The FSO utilizes the commander's decision as the basis for integration and synchronization of the fire support plan to support the selected COAs.
 - d. Commander articulates fire support (CAS, mortars, artillery), prioritization of targets, and desired effects in support of selected COA.
 - e. Mortar platoon, subordinate FSOs, and fire support planners informed of COA selection.
 - f. Brigade FSO/FSE/ALO and DS FA battalion notified of COA selection.
 - g. Fire support plan is adjusted to comply with TF Commander's modification of COA.
 - h. See CCF 7; CCF 8; CCF 9; CCF 18, Task 10.
11. **Staff prepares OPORD/FRAGO** (ARTEP 6-115-20-MTP, Task 06-3-02-1360, 1380, 1390; ARTEP 71-2-MTP, Task 7-1-3901/5, 3907/1, 3907/2, 3908/4; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Appendix G; FM 101-5, Chap 4)

CCF 15 — Coordinate, Synchronize and Integrate Fire Support

- a. FSO ensures that the TF commander's intent for fire support is included in the order. The fire support plan supports the commanders intent and concept and is synchronized with the scheme of maneuver, reconnaissance and surveillance plan, obstacle plan, and tasks to subordinate elements.
- b. The fire support plan is prepared for inclusion into the TF order. The FSO writes paragraph 3a(2) (FIRES) portion of the order.
 - 1) Outlines how the fire support plan is synchronized and integrated to support the scheme of maneuver.
 - 2) Designates which maneuver units have priority of fires and how that priority will be executed.
 - 3) Prioritize type of fires (CAS, counterfires, etc.), states the why, what, how, and when of fire support.
 - 4) Describes preparatory fires (times, duration, intended effect).
- c. Fire support annex, overlay and matrix are prepared which:
 - 1) Define the roles, responsibilities, and command relationship (as required) for all supporting fire support systems.
 - 2) Outline specific responsibilities for targets and missions to TF subordinate company/teams and platoons.
 - 3) Identify fire support resources attached to the TF, and task organization internal to the TF.
 - 4) CAS: outline major roles or tasks CAS will perform in support of the operation; allocation of CAS, including priorities and specific control arrangements.
 - 5) FA: details general concept and details on phasing, duration, and employment; allocation, including grouping or organization for combat; deployment areas (which might impact on TF operations in the TF AO); air observation plan.
- d. The fire support plan, annex, overlay, and matrix include the following:
 - 1) Priority of fires (by unit/event). Includes allocation or location of priority targets.
 - 2) Target list, detailing targets assigned for mortars, artillery, CAS, naval gunfire, and other fire support systems. Included is the backup observer for each target, in the event that the primary shooter is unable to shoot the target.
 - 3) Artillery task organization and concept for support.
 - 4) Mortar task organization and concept for support. Includes missions, targets, priorities of fires, and mortar firing positions.
 - 5) CAS concept for support.
 - a) Preplanned CAS requests are completed and forwarded to the Brigade ALO/FSE.

- b) Contingencies are reviewed and analyzed to serve as the basis for Immediate CAS requests.
- 6) Finalized fire support coordinating measures and restrictions.
 - a) The FSO utilized measures and restrictions to ensure that fire support will not jeopardize troop safety, will not interfere with other fire support means, and will not disrupt adjacent unit operations.
 - b) Measures and restrictions are designed to facilitate the rapid engagement of targets.
- 7) Attack guidance. The compilation of the commander's guidance, desired effects of attack, high-payoff target list, attack priorities, and attack criteria.
- 8) Schedule of fires, for field artillery and mortars.
- 9) Quick fire plan, if applicable. FSO assigns targets and possibly schedule of fires to the most appropriate fire support means available.
- 10) Clearance of fires plan.
 - a) The TF commander has the final authority to approve and clear fires and their effects within the TF AO.
 - b) TF commander may delegate to the FSO the authority to coordinate and clear fires.
- 11) Special munitions/targets:
 - a) Smoke (mortar and artillery) missions to obscure enemy observation, screen friendly movement, support breaching operations, and assist disengagements.
 - b) Missions supporting combat and reconnaissance patrols.
 - c) Illumination (mortar and artillery) is planned to support night attacks, engagement areas, and counter-surveillance.
 - d) FASCAM to canalize the enemy into preferred avenues of approach, engagement areas, and to isolate/block/delay enemy forces.
 - e) Copperhead and other laser-guided munitions.
- 12) Target acquisition systems plan:
 - a) Locations for target acquisition system, indicating where systems must be positioned to execute fire support.
 - b) Task organization of target acquisition systems.
 - c) Back-up target acquisition plan in the event that the primary is unable to shoot the mission.
 - d) Employment of lasing assets.

- e. The Fire Support plan is incorporated into the Decision Support Template, detailing the integration and synchronization of fire support with the TF mission, scheme of maneuver, and direct fire plan. Fire support is outlined for all contingencies and branches.
 - f. Synchronization of indirect fire systems in support of Joint Air Attack Team (JAAT) operations and to provide SEAD for CAS.
 - g. Planned CAS requirements completed and forwarded to Brigade ALO/FSE.
 - h. See CCF 5; CCF 6; CCF 7, Task 11; CCF 8, Tasks 11 and 14; CCF 9, Task 11; CCF 16; CCF 18, Task 11; CCF 23.
12. **Issue the OPORD/FRAGO** (ARTEP 6-115-20-MTP, Task 06-3-02-1380/4; ARTEP 71-2-MTP, Task 7-1-3901/7, 3904/11; FM 6-20-20, Chap 5; FM 71-123, Chap 1; FM 101-5, Chap 4)
- a. FSO briefs fire support to TF leaders during the orders issue. ALO provides assistance and is prepared to brief CAS.
 - 1) Artillery and mortar locations, status, and support relationship (DS, GS).
 - 2) Personnel and equipment status of FSOs, FISTs, and all other fire support assets under TF control or operating in the TF AO.
 - 3) Artillery and mortar fires plan.
 - 4) Artillery and mortar ammunition status.
 - 5) CAS, including strike plan, number of sorties available, type of aircraft/ordnance, and coordination instructions.
 - 6) Special munitions.
 - b. Company/team FSOs accompany the commander to the TF order. Mortar Platoon Leader attends the TF order.
 - c. Fire support plan is disseminated to TF subordinate commanders and leaders, including fire support annex, matrix, and overlays.
 - d. Fire support plan is disseminate to supporting FA units and the Brigade FSO/FSE.
 - e. Fire support rehearsals, including times, locations, and persons required, are briefed.
 - f. See CCF 7, Task 12; CCF 8, Task 12; CCF 9, Task 12; and CCF 18, Task 12.
13. **Refine the plan** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; ARTEP 71-2-MTP, Task 7-1-3901/8; FM 6-20-20, Chap 3; FM 101-5, Chap 4).

NOTE: Refinement of the fire support plan is continuous. The deliberate fire planning process relies on top-down planning with bottom-up refinement. Bottom-up fire support refinements are initiated as early as possible, and may occur during the TF planning process while the TF FSO is coordinating with subordinate FSOs. The fire support plan, when

issued as a component of the order, provides subordinate planners with a base-line plan from which to begin refinement.

- a. The fire support plan is refined and improved based on subordinate unit target lists and schemes of maneuver.
- b. The fire support plan is modified and refined based on input from the DS FA battalion. Input includes status on guns, ammunition, equipment, and personnel.
- c. The fire support plan is modified and refined based on updates by the ALO on the progress of planned fires and target allocations. If CAS and other fire support requests cannot be fulfilled, Bde FSE substitutes weapons or other non-lethal system to compensate.
- d. Brigade FSO and FSE provide input on status of brigade fire support plan.
- e. The updated fire support plan is coordinated and disseminated internally (to company/team, mortar platoon and subordinate units) and externally (Brigade FSO/ALO and supporting FA units).
- f. See Task 14; CCF 7, Task 13; CCF 8, Task 13; CCF 9, Task 13; and CCF 18, Task 13.

14. **FSO and Fire Support Section (FSS) Operations** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1390, 1500; ARTEP 71-2-MTP, Task 7-1-3908; FM 6-20-20, Chap 3; FM 6-20-40, Chap 1)

- a. Establish the TF Fire Support Element (FSE).
 - 1) Communications are established with higher, lower, adjacent, supporting and supported units.
 - 2) FSE personnel assist the FSO in planning fire support.
 - 3) A fire support cell can be created to support the FSE. The FS cell may include:
 - a) TF S-3 Air.
 - b) Mortar platoon leader.
 - c) TF chemical officer.
 - d) TACP/ALO.
 - e) Supporting arms liaison team (SALT).
 - f) Air defense officer.
 - g) Other representatives (engineer, Army aviation), depending on the mission.
 - 4) FSO is prepared to work with the S3, S3 Air, Army Aviation LNO, and ALO as a component of the TF Army Airspace Command and Control (A2C2) element if directed by the TF Cdr.
 - 5) See CCF 8, Task 14a; CCF 9.

b. Establish Company/team FIST.

- 1) Communications are established with TF FSE, Co/Tm Cdr, Mortar Platoon, and supporting FA units. Provide status and disposition reports of company team.
- 2) FIST-V and FOs positioned for initial coverage of company/teams AO.
- 3) Planning is initiated immediately following receipt of the TF WARNO, based on coordination with the TF FSO. Forward refinements to the fire support plan to the TF FSO/FSE.
- 4) Company/Team FSO focuses planning on the company/team mission and scheme of maneuver.
- 5) See CCF 8, Task 14b.

c. Mortar Platoon.

- 1) Communications established with TF FSE, company/team FSO/FOs, and supporting FA units.
- 2) Initiates planning upon receipt of TF WARNO.
- 3) When task organized to support the TF Security Force or a maneuver unit, initiates coordination and planning to provide mortar support.
- 4) See CCF 7.

15. **FSO synchronizes and integrates fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1390, 1500; ARTEP 71-2-MTP, Task 7-1-3908; FM 6-20-20, Chap 1; FM 6-20-40, Chap 1)

NOTE: The subtasks listed in this task are conducted and integrated throughout the fire support planning conducted during the TF planning phase.

- a. FSO directs the targeting process based on the TF scheme of maneuver. The targeting process serves as the foundation for the fire support plan, ensuring that the TF commander's intent for fire support, the scheme of maneuver, and the direct fire plan are supported by placing fires on enemy forces or positions.
- b. The targeting process.
 - 1) Requires close interaction between the TF commander, S2, S3, the FS cell, and combat support agencies.
 - 2) Includes:
 - a) Assessment of the terrain.
 - b) Assessment of the enemy, including dispositions, formations, equipment, and facilities.
 - c) Anticipated requirements for SEAD in support of CAS.
 - d) Integration of targets established by Brigade.

- 3) The targeting process results in the development of the Target List. Planned targets are subdivided into:
 - a) Scheduled targets.
 - b) On-call targets.
 - c) Priority targets.
 - c. Targets are analyzed to determine which can be included in the fire support plan. Targets must be capable of being referenced rapidly. Target list is reduced by:
 - 1) Resolving duplication of targets.
 - 2) Deleting targets that do not comply with the TF commanders intent of fire support and the scheme of maneuver.
 - d. Deliberate fire planning is conducted through top-down planning and bottom-up refinement. This refinement process is focused on the target list.
 - e. Fire support planning principles ensure synchronization through:
 - 1) Developing the fire support plan based on the TF commander's intent, ensuring fires support the scheme of maneuver and direct fire plan.
 - 2) Exploiting all available targeting assets, using all available lethal and nonlethal fire support means, employing the lowest echelon able to furnish effective fire support, and using the most effective means while providing adequate fire support.
 - 3) Avoid unnecessary duplication for target engagement. Clearly define field artillery, mortar, and CAS targets. Target engagement plan must be flexible to include alternate means of servicing targets as contingencies if primary system cannot service the target.
 - f. The fire support plan is integrated into the scheme of maneuver and direct fire plan through the DST and the Fire Support Execution Matrix.
16. **FSO coordinates fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1, 1330, 1380, 1390, 1540; ARTEP 71-2-MTP, Task 7-1-3907/3, 3908/5; FM 6-20-20, Chap 3; FM 6-20-40, Chap 2; FM 71-123, Chap 7)

NOTE: Coordination of the fire support plan is a continuous process of implementing fire support planning and managing the fire support assets available to the TF. The FSE acts as the primary fire support agent for the coordination of fire support and fire support activities internally and externally. The FSE is responsible for ensuring the fire support plan supports the TF commander's intent for fire support. Coordination is conducted to ensure that the fire support plan is synchronized and integrated with the TF scheme of maneuver and direct fire plan as well as with the plans of brigade and adjacent units.

- a. Specific FSO responsibilities include:
 - 1) Establish and maintain communications with fire support personnel internal and external to the TF.

- 2) Supervise the target acquisition effort and ensure that the S2 is aware of the fire support intelligence needs.
 - 3) Keeping higher and lower fire support elements informed of supported forces situation.
 - 4) Exchange battlefield information with the supporting FA battalion, Brigade FSO/FSE, and supporting fire support elements. Ensures the continuous flow of targeting information.
- b. FSO/FSE fire support plan coordination:
- 1) Ensure the supporting FA battalion, Brigade FSO/FSE, and mortar platoon have and understand the fire support plan.
 - 2) Ensure fire support coordination measures and restrictions are disseminated internally to TF elements to prevent fratricide.
 - 3) Continuous coordination of fire support plan with subordinate unit FSOs and FOs based on bottom-up refinements and modifications.
 - 4) Internal coordination with TF staff to refine the fire support plan based on the progress of mission preparations. Examples are coordination with the S2 to ensure sensors/GSR are positioned to enhance target acquisition and with the TF Engineer to integrate obstacles into the fire support plan.
 - 5) Coordinate with adjacent units, higher headquarters, and supporting FA units for fires outside the TF sector or AO.
 - 6) Coordination between the TF ALO, the Brigade ALO and higher headquarters to ensure that preplanned CAS requests are being processed and to maintain a current status on available CAS missions outlined in the ATO. The ALO provides updates to the FSO and FSE for refinement of the fire support plan.
 - 7) Coordinate requests for additional fire support assets from Brigade to support the TF scheme of maneuver.
 - a) Based on COA development and analysis, and refinements to the scheme of maneuver and direct fire plans as they are finalized, the FSO seeks additional fire support to enhance the fire support plan.
 - b) Based on actions taken by Brigade and higher headquarters, integrates additional fire support assets into the fire support plan.
- c. Fire support plan dissemination.
- 1) FSE is responsible for distribution of the fire support plan, to include modifications and refinements to the plan.
 - 2) As the fire support plan is improved, the FSE distributes updated Fire Support Execution Matrix and overlays, and directly coordinate with the S3 to update the TF DST.
 - 3) The FSO and FSE ensure that the mortar platoon has updated overlays, target lists, fire support frequencies and call signs to allow it to provide fires in accordance with the fire support plan.

- 4) All TF leaders, down to platoon level, are provided overlays, target lists, FA and mortar platoon frequencies and call signs, and know the target that they are to engage and the criteria for initiating those fires. The company/team FIST is the primary agent for ensuring this is accomplished.
- d. FSO performs as liaison officer for the DS FA battalion.
- 1) Coordinates with the TF commander and staff on the needs and requirements of the FA battalion while operating in or maneuvering through the TF sector or AO.
 - 2) Liaison activities focus primarily on terrain deconfliction between the TF and the FA units.
 - 3) Coordination may include requesting additional support from the TF while FA units are in the TF sector or AO. Support could be required for security requirements, decontamination needs, and assistance with medical and casualty operations.

COORDINATE, SYNCHRONIZE AND INTEGRATE FIRE SUPPORT PREPARATION TASK LIST

CCF 19 (Direct and Lead Units During Preparation for Battle) tasks have been integrated into this task analysis because it reflects command and control aspects of the preparation process. The nine CCF 19 tasks are numbered 17-25 in this analysis preparation task list. Subtasks included under each of the nine tasks reflect those actions or events which are critical to COORDINATE, SYNCHRONIZE, AND INTEGRATE FIRE SUPPORT.

17. **Command Group Conducts and Receives Briefings** (ARTEP 6-115-20-MTP, Task 06-3-02-1380/2; ARTEP 71-2-MTP, Task 7-1-3903/2, 3908/1; FM 6-20-20, Chap 5; FM 71-2, Chap 2, FM 71-123, Chap 2; FM 101-5, Chap 4, Appendix M)
 - a. FSO and FSE representatives provide updates to the TF commander and command group on modifications and refinements of the fire support plan.
 - b. The FSO maintains the status of fire support preparations and is prepared to brief:
 - 1) Available fire support and assigned missions.
 - 2) Artillery organization for combat.
 - 3) Artillery and mortar locations and status.
 - 4) Personnel and equipment status of fire support assets.
 - 5) Artillery and mortar fires.
 - 6) Artillery and mortar ammunition status, to include amounts of illumination, FASCAM, smoke, and their capabilities.
 - 7) Status of other fire support systems (CAS, naval gunfire).
 - 8) Special munitions.
 - 9) Allocation of priority targets and FPFs.
 - 10) Fire support coordination measures.
 - c. Company/team commanders and FSOs are prepared to brief how the TF and Company/team fire support plan supports the company/team mission and TF commanders intent.
 - d. Mortar Plt Ldr briefs mortar platoon support of TF fire support plan. If under the control of a maneuver Co/Tm, briefs how mortar platoon supports the Co/Tm with mortar fires.
 - e. See CCF 7, Task 14; CCF 8, Task 16; CCF 9, Task 15; and CCF 19, Task 1.

18. **Command Group and Command Posts Monitor, Supervise, and Direct Execution of Force Protection Operations and Activities** (ARTEP 6-115-20-MTP, Task 06-3-02-1390; ARTEP 71-2-MTP, tasks 7-1-3904/5, 3904/6, 3905/2, 3905/4; FM 6-20-40, Chap 1; FM 6-20-40, Chap 2; FM 71-123, Chap 2)
 - a. FSO and FSE conduct accelerated planning and provides the TF security force with a quick fire plan, target list (refined by the security force), and fire support execution matrix.
 - b. FSO establishes priority of fires in support of the security force.
 - c. FSO and FSE coordinate and task organize fire support assets under TF control (FIST-Vs, COLTs, and/or FOs) to provide the security force with fire support capabilities.
 - d. FSO integrates the mortar platoon into the fire support package supporting the security force. Makes recommendations to the TF commander on command relationship between the security force and the mortar platoon.
 - e. FSO and ALO are prepared to integrate CAS in support of security force operations, through the "immediate request" process.
 - f. See Task 1; CCF 7, Task 15; CCF 8, Task 17; CCF 9, Task 16; and CCF 18, Task 2.
19. **Command Group and Command Posts Monitor, Supervise, and Direct TF Mission Preparation** (ARTEP 6-115-20-MTP, Task 06-3-02-1390; ARTEP 71-2-MTP, Task 7-1-3001/5, 3901/9, 3901/10, 3904/12; FM 6-20-20, Chap 3; FM 71-123, Chap 2)
 - a. FSE, as a component of the TF Main Command Post, monitors the status of:
 - 1) Preparation and status of the DS FA unit to support the fire support plan.
 - 2) Preparation and status of the TF mortar platoon to support the fire support plan.
 - 3) Preparations and status of target acquisition systems (sensors, GSR, OPs/LPs/patrols, Scouts).
 - 4) Engineer activities and refinement of the fire support plan to coincide with physical obstacle locations.
 - 5) Preparation of fire support assets under TF control include:
 - a) Maintenance activities of equipment and vehicles.
 - b) Basic loads, combat loads, and PLL.
 - c) Distribution of orders and fire support documents from fire support leaders to their subordinates.
 - 6) Receipt and allocation of additional field artillery, CAS, target acquisition and survey assets based on request for additional fire support identified and processed during the planning phase.
 - b. The FSO supervises and directs subordinate unit FSOs, FOs, COLTs, and all other fire support assets under TF control to ensure preparation of the TF fire support plan.

- 1) Ensures fire support plan is refined based on modifications of the TF scheme of maneuver.
 - 2) Ensures fire support plan is synchronized and integrated into the scheme of maneuver and direct fire plan.
 - 3) Ensures assets are positioned in accordance with the plan and can provide planned fire support.
 - 4) Through coordination with the ALO, ensures planned CAS missions are processed by higher headquarters.
 - 5) Ensures task organization of fire support assets as outlined in the fire support plan is conducted.
- c. The FSO provides updates on status of fire support asset preparation and preparation of the fire support plan to the TF staff and Brigade FSO/FSE.
 - d. Co/Tm FSOs ensure fire support assets are positioned to maintain communications with the TF FSO and FSE.
 - e. Mortar platoon provides updates on mortar fire support preparations (status of weapons, ammunition, equipment, and personnel). Even when under the control of a maneuver company/team, provides feedback to the TF FSO/FSE.
 - f. TACP/ALO monitors status and provides updates on CAS requests and availability of aircraft to support the TF mission.
 - g. See CCF 3; CCF 4; CCF 7, Task 17; CCF 8, Task 18; CCF 9, Task 17; and CCF 19, Task 3; CCF 24; CCF 28; CCF 29, CCF 31.
20. **Commander, Commander's Representatives, and Staff conduct inspections and visits** (ARTEP 71-2-MTP, Task 7-1-3903/2; FM 71-2, Chap 2; FM 71-123, Chap 2)
- NOTE: Inspections and visits are conducted to ensure all subordinate and support elements and leaders understand the fire support plan (including their roles in executing the plan) and to ensure that fire support assets are complying with the TF order. They are conducted to determine the forces readiness to execute its assigned tactical mission. Time available determines who and what will be inspected and visited. Inspections and visits should be focused on those critical points (events, personnel, or equipment) that could mean the difference between mission success or failure.
- a. FSO inspects and visits fire support assets under TF control to monitor mission preparation and ensure dissemination of fire support plan.
 - b. FSO visits Brigade and adjacent unit FSO/FSEs to exchange TF fire support plans and documents.
 - c. FSO visits supporting FA unit CPs and FDCs to verify and coordinate fire support.
 - d. ALO visits Brigade FSE and ALO to ensure CAS requests are being processed and to keep updated on CAS plan and Air Tasking Order (ATO).
 - e. See CCF 7, Task 18; CCF 8, Task 19; CCF 9, Task 18; and CCF 19, Task 4.

21. **Task Force Rehearsals** (FM 6-20-20, Chap 1; FM 6-20-40, Chap 2; FM 71-2, Chap 2; FM 71-123, Chap 2; FM 101-5, Appendix M)

NOTE: Rehearsals allow the fire support plan to be synchronized with and integrated into the scheme of maneuver and direct fire plan. They improve comprehension of the plan. Rehearsals presuppose a complete plan; rehearsals are designed to show whether everyone knows his responsibilities and the cues for action. The fire support plan is rehearsed concurrently with the maneuver plan to improve responsiveness of fires and to ensure the fire support is synchronized and integrated with the maneuver plan.

- a. In addition to rehearsing the fire support to address possible enemy courses of action, the rehearsal includes:
 - 1) The use of primary and alternate communications nets.
 - 2) Positioning of munitions, observers, and weapons systems.
 - 3) Alternate attack systems to be used in the engagement of specific targets.
 - 4) Alternate observers to be used in the engagement of specific targets.
- b. TF Rehearsal.
 - 1) Fire support plan is rehearsed concurrently with the TF commander's combined arms rehearsal. The FSO uses the TF OPORD, the fire support plan, the DST, and the fire support execution matrix.
 - 2) Key fire support personnel (TF FSO, ALO, S3 Air, and Co/Tm FSO/FIST, COLTs, mortar platoon leader) participate in the TF rehearsal.
 - 3) TF leaders verify how the fire support system will be utilized to engage designated targets. If non-fire support personnel are responsible for shooting a specific target(s), they will verify how they will execute the fire support plan and the criteria for target engagement.
 - 4) Fire support trigger lines are verified, and type of munitions is reviewed to ensure desired effect (suppression, neutralization, destruction) is achievable.
 - 5) Fire support coordination measures, restrictions, and signals for execution are verified.
 - 6) DS FA battalion and Brigade fire support representatives participate in the TF rehearsal to verify:
 - a) The fire support plan, movement plan, schedules of fire submitted by the FSOs, and munitions requirements.
 - b) Acknowledge modifications to the plan based on TF preparation and rehearsals.
 - c) Brief how the DA FA battalion and Brigade FSO will maneuver and employ fire support.
 - 7) Rehearsal includes the positioning and displacement plan for fire support target acquisition systems (FIST-Vs, FOs, COLT).

- 8) Mortar and FA unit positioning and displacement plans are rehearsed to ensure the fire support plan can be executed without affecting the ground maneuver of TF elements.
 - 9) Back-up observers are rehearsed to ensure that the fire support plan can be executed in the absence of the primary target shooters.
 - 10) CAS plan is rehearsed, to ensure all TF elements understand how CAS will be integrated into the scheme of maneuver.
 - c. External fire support rehearsals conducted by the DS FA battalion, Brigade FSE, and TF FSE.
 - 1) All fire support assets under TF control (FIST-Vs, FOs, COLTs, TACPs) participate in the Brigade combined arms and DS FA battalion technical rehearsals, as required.
 - 2) Primary and alternate communications systems (voice and digital) and frequencies for fire support are tested and verified.
 - 3) The TF maneuver plan, fire support plan, and fire support execution matrix are used to conduct the rehearsals.
 - d. Company/team rehearsals.
 - 1) Fire support is synchronized with and integrated into the company/teams scheme of maneuver and direct fire plan.
 - 2) The FSO verifies and validates the positioning plan for the FIST-V and FOs to ensure all assigned planned targets can be observed and fired.
 - 3) The alternate observer plan is rehearsed to ensure fire support can be executed in the absence of the FSO, FIST-V, and FOs.
 - 4) FSO and FOs rehearse the fire support plan prior to the TF, Brigade, and FA battalion rehearsals.
 - e. Mortar Platoon.
 - 1) Conducts internal rehearsals for displacements and for shooting assigned targets.
 - 2) If task organized to a maneuver company/team, participates in the company/teams rehearsal.
 - f. During all rehearsals, the FSO or a fire support representative keeps notes on modifications and refinements to the scheme of maneuver and fire support plan. These notes will be utilized to update fire support documents (FS Execution Matrix, fire support overlays, etc.).
 - g. See CCF 5; CCF 6; CCF 7, Task 19; CCF 8, Task 20; CCF 9, Task 19; CCF 16; CCF 19, Task 5; CCF 21; CCF 23.
22. **Task Force Plan Modified and Refined** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; ARTEP 71-2-MTP, Task 7-1-3908/5, 3901/8, 3904/12; FM 6-20-20, Chaps 1, 3; FM 6-20-40, Chap 2; FM 71-2, Chap 2)

NOTE: The TF and subordinate unit's fire support plans are continually refined and updated. The process is initiated as early as the issuance of the TF WARNO. Modifications and refinements are processed by the FSE/FIST as they develop from mission planning, mission preparation, and rehearsals. Processing of modifications and refinements are not delayed from being processed once the commander has been briefed and has approved the changes. Modifications will also be required when requests made to higher headquarters for additional support are either disapproved or another fire support system is assigned the mission in place of the system originally requested.

- a. The fire support plan is refined and updated based on:
 - 1) Rehearsals, completion of obstacles, intelligence updates on enemy dispositions and activities, and the continued modification of the scheme of maneuver and direct fire plan.
 - 2) Refinements are made by the FSO/FSE based on input from company/team FSOs.
 - 3) Information obtained from the brigade FSO/FSE, supporting FA units, the ALO, and liaison officers.
- b. Refinement and modification of fire support plans.
 - 1) The TF FSO/FSE consolidates target lists from the company FSOs, resolves duplications, and forwards the target lists to the brigade FSO/FSE and DS artillery battalion FDC.
 - 2) Fire support schedules are updated.
 - 3) Additional fire support assets are requested to meet new requirements.
 - 4) Additional fire support assets provided to the TF are integrated into the fire support plan.
- c. The FSE is responsible to ensure that all fire support refinements and modifications are reflected in the FS Execution Matrix, FS overlays, and DSTs.
- d. The FSO/FSE disseminates updated fire support documents to subordinate and supporting units/elements and the TF staff.
- e. Fire support is refined to ensure it is synchronized and integrated with the scheme of maneuver (to include contingencies, branches, and sequels), the direct fire plan, and the TF commander's intent for fire support. Synchronization and integration are designed to optimize combat power.
- f. CAS missions are continually refined based on the ATO and on input provided by the Brigade FSO and ALO on available air sorties.
- g. Refinement and modification of the fire support plan continue up to the set cut-off time. The cut-off time is the time set prior to mission execution to permit completion of fire support plan improvements prior to mission execution. The fire support network (FSE, Brigade FSE, DS FA battalion, etc.) requires time to process the target list and Fire Support Execution Matrix modifications.
- h. See Tasks 6, 7, 8, 9, 15, 16; CCF 4; CCF 6; CCF 7, Task 20; CCF 8, Task 21; CCF 9, Tasks 20 and 24; CCF 19, Task 6; CCF 23, and CCF 24.

23. **Command Post (TAC, TOC, CTCP) Operations** (ARTEP 6-115-20, Task 06-3-02-1300/2; ARTEP 71-2-MTP, Task 7-1-3904; FM 6-20-20, Chap 3)
 - a. FSE operates as a component of the TF TOC.
 - 1) Maintains communications with all fire support elements.
 - 2) Maintains status of fire support assets and the refinements to the fire support plan. Provides updates to the TF commander and staff.
 - b. TACP may operate as a component of the TF TOC or may be positioned forward to coordinate CAS operations.
 - c. The FSO and ALO are prepared to position forward with the TF Commander as components of the TAC CP.
 - d. The FSE and TACP monitor fire support preparation as outlined in tasks 17, 18, 20, and 21 above.
 - e. See CCF 4; CCF 7, Task 21; CCF 8, Task 22; CCF 9, Task 21; and CCF 19, Task 7.
24. **Liaison and coordination with higher, adjacent, supported and supporting elements** (ARTEP 6-115-20-MTP, Task 06-3-02-1300, 1330; ARTEP 71-2-MTP, Task 7-1-3901/8, 3907/3, 3902/10; FM 6-20-20, Chaps 1, 2, 3)
 - a. The FSE and ALO continually update the TF command group and staff on coordination and liaison results.
 - b. The FSE ensures:
 - 1) Battlefield information and coordination needs are passed and exchanged.
 - 2) The fire support plan is coordinated internally with subordinate fire support elements, staff, commanders, and mortar platoon.
 - 3) The fire support plan is coordinated externally with Brigade FSO/FSE and ALO, adjacent unit FSEs/ALOs, and supporting FA units CPs/FDCs.
 - c. Coordination and liaison are conducted to ensure:
 - 1) Fire support plan is disseminated and can be supported.
 - 2) Fire support is synchronized with the TF scheme of maneuver and direct fire plan.
 - d. The FSO performs as liaison officer for the DS battalion.
 - 1) Coordinates with the TF commander and staff on the needs and requirements of the FA battalion while operating in or maneuvering through the TF sector or AO.
 - 2) Liaison activities focus primarily on terrain deconfliction between the TF and FA units.

- 3) Coordination may include requesting additional support from the TF while FA units are in the TF sector or AO. Support could be required for security purposes, decontamination needs, and assistance with medical and casualty operations.
 - e. ALO/TACP coordinates with aircraft and supporting CAS ground and air elements.
 - f. See Task 16; CCF 7, Task 22; CCF 8, Task 23; CCF 9, Tasks 22 and 25; CCF 19, Task 8.
25. **Command Group and Command Posts Position to Control the Battle (ARTEP 71-2-MTP, Task 7-1-3901/11; FM 6-20-20, Chap 3)**
- a. FSE, as a component of the TF TOC, positions prior to LD time/NLT mission time.
 - b. FSO/FSE establishes communications (voice and digital) to ensure it can process fire support missions during mission execution.
 - c. The TF commander organizes the Command Group to position forward to control maneuver and fires. The fire support component of the Command Group may include:
 - 1) TF FSO.
 - 2) The ALO and/or FAC.
 - 3) The S3.
 - d. The FSO, FSE, and ALO are positioned and prepared to process and control fire support missions.
 - e. TACP is organized for the mission by the ALO.
 - f. See CCF 7, Task 23; CCF 8, Task 24; CCF 9, Tasks 23 and 26; CCF 19, Task 9; CCF 24.

COORDINATE, SYNCHRONIZE AND INTEGRATE FIRE SUPPORT EXECUTION TASK LIST

CCF 20 (Direct and Lead Units in Execution of Battle) tasks have been integrated into this task analysis because it reflects command and control aspects of the execution process. The seven CCF 20 execution tasks are numbered tasks 26-32 in this task analysis execution task list. Subtasks included under each of the seven tasks reflect those actions or events which are critical to COORDINATE, SYNCHRONIZE, AND INTEGRATE FIRE SUPPORT. Task 33 details specific fire support tasks which are considered by the analyst as critical to this CCF.

26. **TF Command Posts located where they can control the battle** (ARTEP 6-115-20-MTP, Task 06-3-02-1300/2; ARTEP 71-2-MTP, Task 7-1-3901/11, 3903/1; FM 6-20-20, Chap 3)
 - a. FSE displaces with the TF TOC. Positions provide and facilitate security, cover, and concealment.
 - b. FSE maintains communications with supporting and supported units to process and control fire support. Ensures battlefield information is disseminated internally within the TF and externally to brigade FSE and DS FA battalion.
 - c. FSO and/or ALO, deployed forward as a component of the Command Group, occupy positions to maintain communications and to observe the battlefield for the purposes of controlling fire support.
 - d. See CCF 7, Task 24; CCF 8, Task 27; CCF 9, Task 27; CCF 20, Task 1; CCF 24.
27. **TF Commander sees the battlefield** (ARTEP 71-2-MTP, Task 7-1-3901/11; FM 71-100, Chap 1)
 - a. FSO/FSE process information on subordinate unit dispositions and activities to track the flow of battle.
 - b. FSO coordinates with the TF staff to gain information concerning battlefield events and the flow of battle. This information allows the FSO to:
 - 1) Visualize the current battle.
 - 2) Process and control fire support.
 - 3) Anticipate future battlefield events, necessitating modification and refinements of the fire support plan.
 - c. The FSO/FSE provides updates to the TF commander and staff.
 - 1) Reports on dispositions, status, and activities of fire support assets under TF control (COLTs, FIST-Vs, FOs, TACP, OH-58Ds).
 - 2) Updates are based on SPOTREPs and requests for fire support from subordinate units.
 - 3) Describes and outlines the execution of the fire support plan.

- 4) Status of supporting fire support assets.
 - d. See CCF 3; CCF 4; CCF 7, Task 25; CCF 8, Task 28; CCF 9, Task 28; and CCF 20, Task 2.
28. **TF Commander directs and leads the execution phase** (ARTEP 71-2-MTP, Task 7-1-3901/12, 3903/4, 3903/5; FM 71-100, Chap 1)
- a. The FSO/FSE monitor the execution of the Fire Support Execution Matrix and the employment of fire support. Process fire support requests to support the execution of the scheme of maneuver
 - b. The FSO responds to changes in the TF commander's guidance and intent for fire support.
 - c. FSO coordinates modifications to the fire support plan to support the TF commander's intent for fire support as the battle unfolds.
 - d. TF commander exercises overall control of fire support through FRAGOs to change missions/tasks for supporting fire support systems.
 - e. See CCF 5; CCF 6; CCF 7, Task 26; CCF 8, Task 29; CCF 9, Task 29; CCF 20, Task 3; CCF 21; CCF 23.
29. **TF Command Posts track and support the battle** (ARTEP 71-2 MTP, Task 7-1-3903/3, 3904/14; FM 6-20-20, Chap 3, 4; FM 71-123, Chap 1)
- a. FSO/FSE process and coordinate fires based on:
 - 1) The execution of planned fires in accordance with the Fire Support Execution Matrix and the DST. Planned fires are shot based on the primary or back-up observers' instructions to execute their assigned targets.
 - 2) The execution of target of opportunity fires based on fire support requests from observers.
 - b. FSE ensures fires are synchronized and integrated with the TF maneuver and direct fires.
 - 1) Through coordination with the TF commander, S3, and mortar platoon leader, ensures mortar fires are integrated into the fight.
 - 2) Through coordination with the TF commander, S3, Brigade FSO/FSE, and supporting artillery units, ensures artillery fires are integrated.
 - 3) Through coordination with the TF commander, S3, ALO and Brigade FSO/ASO/FSE integrates CAS strikes.
 - c. FSO operates forward with the Command Group.
 - 1) FSO acts as the TF commander's FO, requesting and controlling key TF fire missions directly.

- 2) FSE assumes responsibility to process and coordinate fires based on reduced control from FSO.
 - d. FSE tracks the battle flow based on:
 - 1) SPOTREPs and reports from subordinate fire support elements, including BDA reports from observers.
 - 2) Through coordination with the TF TOC and monitoring of the TF command nets, tracks the ground maneuver of the TFs combat forces.
 - e. The FSO and FSE conduct clearance of fires for fire support. Continuous communication and coordination are made between the FSE and all supported, adjacent, supporting fire support elements and maneuver units to ensure fires are not directed against friendly forces.
 - f. Air defense assets are controlled and CAS is integrated into the execution of fire support.
 - g. See CCF 7, Task 27; CCF 8, Task 30; CCF 9, Task 29; and CCF 20, Task 4.
30. **TF conducts battlefield update (METT-T based) (ARTEP 6-115-20-MTP, Task 06-3-02-1300/4, 1330/3, 1500/3; ARTEP 71-2-MTP, Task 3902/3; FM 6-20-20, Chap 3)**
- a. The FSO monitors and provides updates on the status of FA and mortars, to include the type and quantity of ammunition available.
 - b. The mortar platoon provides updates on status and disposition.
 - c. The ALO provides updates on the status and availability of CAS.
 - d. The FSO provides updates based on SPOTREPs and reports from fire support observers (FIST-Vs, FOs, COLTs, TACP) and from TF external sources (brigade FSO/FSE, DS FA battalion, DIVARTY, and adjacent unit fire support elements) to supplement and reinforce information provided over the TF and brigade command nets.
 - e. Updates are provided to the TF commander and to the supporting and subordinate fire support elements to ensure the fire support network maintains a current picture of the TF in the battle.
 - f. Provide updates to the TF commander and the TF on the displacement of supporting FA units and mortars as the displacement affects available fire support.
 - g. Updates include success or failure for indirect fires previously executed, based on reports from observers.
 - h. See CCF 3; CCF 4; CCF 7, Task 28; CCF 8, Task 31; CCF 9, Task 31; and CCF 20, Task 5.
31. **TF conducts the decision making process (accelerated) (ARTEP 6-115-20-MTP, Task 06-3-02-1300/1; FM 6-20-20, Chap 3; FM 71-123, Chap 1)**

- a. The FSO provides guidance, recommendations, and expertise on fire support to the TF commander during the decision making process. Receives and acts on priorities for fire support by the TF commander.
 - b. The fire support plan, Fire Support Execution Matrix, and DST are reviewed to determine if they are still provide sufficient fire support to the battle.
 - c. Based on time available, the FSO/FSE modify and refine the fire support plan to support unplanned battlefield events. The fire support plan is modified and refined to allow the TF to maintain the initiative instead of having to rely on continued execution of unplanned, target of opportunity missions.
 - d. ALO/TACP identify and process immediate CAS requests and requirements in support of the TF Commander's guidance.
 - e. See CCF 7, Task 29; CCF 8, Task 32; CCF 9, Task 32; CCF 20, Task 6.
32. **TF consolidates and reorganizes** (ARTEP 71-2-MTP, Task 7-1-3022/2, 3023, 3907/4, 3908/4)
- a. Fire support assets under TF control are reorganized and redistributed in order to provide fire support capability to all remaining TF units.
 - 1) Senior fire support leaders assumes position of TF FSO, based on TF commanders approval.
 - 2) Key fire support positions are filled from fire support personnel available.
 - 3) Fire support mission essential equipment (e.g., digital and voice communications, lasers) are inspected to determine serviceability. Cross-leveling is conducted as required.
 - 4) Fire support elements (FSE, FIST, FOs) are reorganized and redistributed to remaining TF maneuver units.
 - b. The FSO/FSE processes and coordinates fires in support of the TF reorganization and consolidation.
 - c. The FSO/FSE provides status reports to the brigade FSE and DS FA battalion on fire support assets remaining in the TF. Coordinates to acquire additional fire support assets to replace battlefield losses.
 - d. FSO, through coordination with mortar platoon leader, determines reorganization requirements for the mortar platoon.
 - e. See CCF 7, Task 30; CCF 8, Task 33; CCF 9, Task 33; CCF 20, Task 7; CCF 33.
33. **Execution of synchronized and integrated fire support** (ARTEP 6-115-20-MTP, Task 06-3-02-1360, 1370, 1390/2, 1390/3, 1420, 1500/3, 1550, 1560, 1580; ARTEP 71-2-MTP, Task 7-1-3901/12, 3901/15, 3903/5, 3907, 3908; FM 6-20-20, Chaps 1, 2, 3; FM 71-123, Chap 7)

NOTE: Planned fire support is executed as outlined in the Fire Support Execution Matrix and the DST. Targets of opportunity are executed within the context of the Fire Support Execution Matrix and the scheme of maneuver. In the event that the FS Execution Matrix and DST are determined to be invalid due to battlefield events and unanticipated enemy actions, the FSO and FSE conduct accelerated fire support planning. Accelerated fire support planning is based on the development of new target lists based on updated intelligence and IPB and changes to the TF scheme of maneuver. The fire support plan utilizes as much of the initial fire support plan as possible to reduce the impact of changes. The new target lists are incorporated into a modified or new Fire Support Execution Matrix to match targets to available fire support weapons systems.

a. The FSO/FSE operations.

NOTE: Fire support is employed to support the TFs execution of maneuver and to supplement and reinforce the TFs direct fires. Fire support is used to engage enemy troops, weapons, or positions that are threatening the TF. Fire support must be flexible to support the scheme of maneuver.

- 1) The FSO is responsible for the coordination, execution, and control of fire support in support of the TF commanders scheme of maneuver during mission execution.
 - a) Reviews, approves or disapproves, and prioritizes all fire support requests in accordance with the TF commanders Intent for Fire Support, the Fire Support Execution Matrix, and the DST.
 - b) Continuously coordinates with the TF S2, S3, ALO, DS FA Battalion TOC, Brigade FSO/FSE, and Mortar Platoon Leader to ensure that fire support is available throughout the TF's maneuver.
- 2) The FSE, with guidance by the FSO, processes and coordinates the execution of fires as outlined in the Fire Support Execution Matrix and DST.
 - a) In the absence of the ALO, the TF FSO and FSE are responsible for the employment of CAS.
 - b) Synchronizes and integrates fire support with the TF's maneuver and direct fires.
 - c) Manages the employment of special munitions (FASCAM, smoke, illumination, FPFs, etc.) as outlined in the fire support plan and fire support execution matrix.
 - d) Through coordination with the ALO and TACP, monitors execution of CAS. Provides back-up communications and coordination support to ALO/TACP on requests for immediate CAS.
 - e) Monitors status (ammunition available, dispositions) of mortar platoon. Through coordination with the mortar platoon, directs mortar fires in support of the fire support plan.
 - f) Manages SEAD fires in support of CAS and Army aviation attacks.
 - g) Manages lasing operations for target acquisition assets under TF control (COLTS, FIST-Vs).

- h) Changes priority of fire or priority of targets to support the TF scheme of maneuver and direct fire fight.
 - i) Receives and allocates FA, mortars, CAS, and other fire support to support the TF mission, based on the TF Commander's guidance and intent for fire support.
 - 3) The FSE manages reports, processes and coordinates requests for fire support from target acquisition assets.
 - a) Executes fire support requests from planned target observers and back-up observers.
 - b) Executes fire support requests from elements on the battlefield on targets of opportunity not included in the fire support plan.
 - 4) The FSE coordinates with the brigade FSO/FSE, DS FA battalion.
 - a) For attack of targets outside the TF sector.
 - b) Keeps brigade and the DS FA battalion updated on TF locations, dispositions, target attack success, and the tactical situation.
 - c) Coordinates requests for additional fire support in support of the TF maneuver.
 - 5) Relays calls for artillery and mortar fires from subordinate fire support assets that cannot maintain communications with supporting FDCs.
 - 6) Ensures fires adhere to fire support coordination measures and restrictions. Manages fire support clearance of fires to eliminate the risk of fratricide. Recommends adjustments of control measures and restrictions to support the execution of TF maneuver.
 - 7) Conducts continuous fire support planning to ensure battlefield flexibility, conform to new METT-T factors, and to changes in the TF commanders guidance and intent.
 - a) Continuous coordination with the TF S2, S3, and other staff to modify and update the fire support plan based on battlefield events and unforeseen conditions.
 - b) Planning conducted to allow the TF to maintain the initiative if the scheme of maneuver and enemy do not respond as anticipated.
 - c) Manages repositioning of target acquisition assets to support changes to the fire support plan.
 - d) Keeps TF commander, staff, and subordinate fire support assets and maneuver units updated on changes and modifications of the fire support plan.
- b. Manages target acquisition operations during the conduct of operations through positioning of observers on the battlefield. Observer positioning is executed as outlined in the Fire Support Execution Matrix and the fire support plan. Positioning of observers is flexible in order to allow for modifications and refinements in the fire support plan.

- c. Company/team FSO and FIST operations.
 - 1) Employs fire support to attacks targets in their AO as outlined in the fire support plan, Fire Support Execution Matrix, and DST.
 - 2) Calls for, processes, adjusts, and directs all calls for fire support from observers and FOs to FA FDCs, mortar platoon FDCs, and TF FSE.
 - 3) Determines the effects of the target on the mission and determines the need for immediate attack by fire support.
 - 4) Maintains communications (voice and digital) with TF FSE, DS FA battalion FDCs, mortar platoon FDCs, and FOs.
 - a) Updates the TF FSE on the tactical situation and dispositions of maneuver forces.
 - b) Monitors the status of available fire support and provide updates to the supported force.
 - c) Support the TF FSO/FSE in ensuring positive clearance of fires to avoid fratricide.
 - 5) Processes calls for fire on targets of opportunity.
 - 6) Manages and cues G/VLLD laser operations for assets under company/team control.
 - 7) Manages target observer plan. Ensures primary and back-up observers are positioned to shoot the target and can direct and control fires.
 - 8) Positions, and as required repositions, FOs and FIST-V to call for, adjust, and direct fire support in support of the company/team scheme of maneuver. Anticipates changes dictated by the developing battle, and recommends revision of the fire support plan.
 - 9) Based on results of fires placed on targets, determines BDA and reports to the TF FSO for decision to re-engage/re-attack targets.
- d. TACP/ALO controls CAS aircraft during mission execution.
- e. See CCF 5, Task 8; CCF 6; CCF 7; CCF 8, Task 34; CCF 9, Task 34; CCF 21; CCF 23.

CALL LESSONS LEARNED RELEVANT TO CCF 15 (EXTRACTS FROM LESSONS LEARNED BULLETINS)

1. NTC Commander's Memorandum — Nov 85

The fire support plan is far more than a target list or schedule of fires. It is an articulation of how supporting fires are to be employed with the other elements of combat power to accomplish the mission. The timing of maneuver and fires must be developed and then fully explained. "Priority of artillery fires to Team B. See target list." simply does not cut it.

Specific guidance from battalion concerning where, when, and what to shoot rather than a allocation of priorities to specific companies is often the most effective method of synchronizing fires with maneuver. The fire plan should originate at task force level and then be modified and expanded based upon company input. Given that there is never sufficient artillery to do all things, a centralized approach guards against the risk of firing a few rounds at a large number of low priority targets. The preferred solution is a lot of rounds on a few particularly critical targets.

...it is important to guard against the tendency to fire preplanned targets when the enemy of somewhere else. Adjustments from preplanned targets or grid missions must be used if that is what it takes to get the fire on the enemy.

A face-to-face meeting between brigade and task force FSOs and the DS Battalion S3 and FDO, where the concepts of operations and intents of the various maneuver commanders are discussed, pays rich dividends.

The fire support execution matrix, the linkage of targets to systems and the identification of specifically who is to shoot by phase of battle, is a very effective tool. Responsibility for each target to include identification on the ground, observation, execution, and adjustment as necessary is given to a specific unit, e.g., company team, scout platoon. Sufficient redundancy is required to guard against obscuration and casualties.

Communications between companies, FSOs, and FDCs need to be thoroughly checked before the battle to include necessary corrective action. The location of OPs, obstacles, and reference points require confirmation by resection or PADs to the maximum extent possible. Commanders, subordinate infantry and tank leaders, FOs, and others responsible for specific targets must be able to point them out on the ground. Trigger lines based upon projected enemy routes and movement rates must be clearly identified.

While FSOs and FOs play a big role, the effective integration of fire is a command responsibility and there clearly needs to be a lot of non-artillerymen calling for fire. All leaders must know the frequencies and how to make the system work.

TACFIRE tends to back up during battles and it is difficult to override the queuing sequence, in part because the TF FSO forward cannot monitor the fire nets. Non-TACFIRE nets can also become jammed with the stronger stations overriding. In either case, the likely consequence is that fires will not be massed on the highest priority targets. Disciplined fire nets is obviously important. In addition, the establishment of a voice fire coordination net for the task force is recommended. On this net, the FSO passes instructions to company FSOs and his FSE, and he receives feedback on what is happening on fire direction nets. Unless the TF FSO has a net to receive information and pass instructions, he becomes just another FO.

Artillery illumination should be planned for all night operations, even when the primary concept calls for no illumination. Plans need to delineate specific conditions which will trigger the use of illumination and who will make the decision. Even when gunners can acquire targets with night sights, leaders often need illumination to facilitate command and control and fire distribution.

2. **NTC Lessons Learned Bulletin – Jan 86**

Fire Support Planning Timeline

Even though fire planning is a continuous process, there must be a "drop dead" time for making changes to an existing fire plan. A good cut-off time is one hour prior to execution. Naturally, critical changes occur after the "drop dead" time, but adherence to this time allows everyone to make their final preparation.

Communications Between the Commander and FSO is an Art

Communications between the TF commander and his FSO is critical. If there is a misunderstanding, it will probably not be obvious until the execution commences. The FSO must communicate his thoughts in a language the commander will understand. For example, the FSO should tell him how many minutes of smoke (HC) are available, not how many rounds; or firing a preplanned 400m x 400m (medium) FASCAM minefield takes 7-12 minutes to fire and with displacement to an alternate position may result in the TF being unable to use its artillery for 45 minutes to one hour on other missions.

Maintaining Proficiency of the Basic Skills

During the planning sequence, the TF FSO must develop a maneuver battalion voice fire support net and in conjunction with the FA BN S3, a voice fire direction net to be utilized during emergencies. Once the dedicated voice nets are established, a unit must rehearse these techniques and procedures to ensure execution during the battle. The TF FSO must ensure that all leaders know what frequencies and call signs to use.

3. **NTC Lessons Learned Bulletin – Sep 86**

Rehearsing the Fire Plan

The successful execution of a fire plan is directly proportional to the amount of prior planning and rehearsing. Units as a whole, plan and coordinate fire plans well but very few units take the time to rehearse them with the maneuver plans.

Rehearsing a fire plan is no different than wargaming a maneuver commander's concept of the operation. In fact, both require the same thought process and players. This thought process must ensure synchronization of fire support to enhance the maneuver commander's intent of fighting the battle. When rehearsing a fire plan, the following areas must be addressed:

- a. Who is responsible to initiate the mission and over what net?
- b. What is the redundancy in execution?

- c. Who clears fire?
- d. How is the maneuver commander made aware of the voids in fire support due to artillery units moving, mission processing times, etc.?
- e. What are the capabilities and limitations of field artillery?
- f. How many missions can be fired before artillery starts moving?
- g. How many targets of opportunity can be fired without interfering with the execution of the fire plan?

The maneuver commander walks through the concept of the operation and depicts (based on the fire plan) where and when he wants fire support. As the maneuver commander identifies a target:

- a. The person shooting it explains where and when he executes the mission; what net and call signs he uses; and what effect he anticipates on the target.
- b. The alternate shooter addresses the same question.

This rehearsal continues until the fire plan is completed. This tests whether the fire plan supports the task force commander's scheme of maneuver. Other successful tactics, techniques, and procedures to execute fires are:

- a. Assign targets (high value targets, groups, series, etc.) to a commander for execution, not to the FSO. In most cases, the FSO is going to be co-located with the commander and will actually do the requesting and adjusting. The smarter maneuver commander ensures his subordinates know how the fire plan is synchronized with the battle plan. A maneuver company commander, given the mission to fire group A1B at PL RED, will certainly be at the right place, at the right time to do just that. He will also probably ensure his FSO has good communications with the FDC and the mission goes as planned.
- b. Control the target of opportunity missions that are fired during the battle by the maneuver with close coordination with the FSO.

4. **NTC Commander's Comments – The CS Team – 1987**

Fire planning must be a continuous process to be successful. Decentralization (informal) planning, like centralized (formal) planning, is a product of the situation, the time available, and the echelon at which it occurs. Fire planning should be both formal and informal, regardless of the time available, to be executable and successful. A fire plan formulated and disseminated from higher to lower, will allow the fire plan to be communicated to support the commander's concept but feedback from the lower echelons is vital to refine the plan according to conditions that lower units meet.

5. **CALL, Vol 1: Heavy Forces – Fall 88**

Fire Support Execution Matrix – A Valuable Tool

Target lists that consist of quality targets and not quantity are more likely to succeed. These target lists must support the commander's concept.

Location of FOs/FSOs

Problem: Frequently cited as one of the problems facing units on the battlefield is disagreement over the location of fire support personnel relative to their supported maneuver commanders. Successful tactics, techniques, and procedures:

- a. The tactical requirement is for the FSO to be responsive to or, in some cases, under the control of the maneuver commander he supports. The key consideration is whether his location enables him to accomplish his mission. If his primary function during a battle is to be the commander's FO, he should be as close to the maneuver commander as possible, while maintaining observation of the battalion area. If his mission is to fire a series or group of planned targets as part of the overall fire plan, the FSO must observe those targets at all times and remain responsive to the maneuver commander throughout the entire battle.
- b. Commanders and FSOs should work together to determine the best location for the observers. They share responsibility for positioning them where they can see the battlefield and contribute to the operation's success. The FO must select observation posts and movement routes to support the maneuver commander's scheme of maneuver. The FSO must apply the factors of METT-T to determine optimal positions for his observers.

6. CALL, Non-Mechanized Forces – Spring 89

Fire Support Execution Matrix and Maneuver Commanders

The fire support execution matrix is an excellent tool for the FSO to explain the fire support plan to the commander.

- a. Give copies of the fire support execution matrix to the Bn/Co commander's, platoon leaders and platoon FOs.
- b. Brief the matrix to those individuals so they understand and visualize the fire support plan and can execute it if required.
- c. Use the fire support execution matrix to conduct a fire support rehearsal. The purpose of the rehearsal is to ensure all personnel fully understand their mission and responsibilities in the fire support plan. Ideally, conduct this rehearsal with a maneuver rehearsal. If the commander does not understand the fire support plan, he will not use it. The fire support execution matrix and the rehearsal overcome this problem.
- d. Fire support fails when the FSO or the Fire Support Sergeant become casualties and their subordinates are unable to step in and accomplish the mission. Train your subordinates and then use them in providing effective fire support during periods of continuous operations.

7. **CALL 90-1, Fire Support for the Maneuver Commander – Feb 90**

The Fire Support Process

Effective fire support starts with, and is the responsibility of, the commander of the maneuver force. Before the battle staff or the fire support staff begins planning the commander must first articulate his intent and guidance for the operation.

The maneuver commander's intent is the foundation that drives the process of planning, preparing, and executing the battle. The commander's guidance and intent provide the basis for collection of information, development of the scheme of maneuver and fire support, and integrating the combat power of the seven operating systems into a cohesive, synchronized force.

The preparation phase gives the commander and staff the opportunity to check and verify the plans against the commander's guidance, and to correct all deficiencies before the execution phase.

The execution phase of the fire support plan is the prosecution of the maneuver commander's intent. The fire support is the prosecution of the maneuver commander's battle plan.

Fire Support Planning

Fire support planning is conducted concurrently as the maneuver force conducts its battle planning, and determines how, when, and with what means targets will be attacked in support of the maneuver force.

The fire support plan includes how fire support elements will move and position themselves, their tactical deception and survivability plans, the survey and target acquisition plans, and how the fires will be allocated to the maneuver force.

The Maneuver Commander Is the Owner of the Fire Support Plan

He must synchronize and concentrate all of his combat power at the critical time and place. Synchronizing and integrating the battlefield operating system is fundamental to success on the battlefield.

The maneuver commander is responsible for integrating fire support and the scheme of maneuver into the concept of operation.

Wargaming

Upon receipt of the commander's guidance, the commander, FSO, maneuver S3, and staff set about to develop the operations order. A critical step in building the foundation for the operations order is wargaming of the mission by the commander and staff. Wargaming allows the maneuver commander to analyze and evaluate various courses of action to determine how best to defeat and destroy the enemy.

As the maneuver commander wargames the operation, the FSO provides the most current information for applying all elements to the fire support system. The FSO recommends options to the maneuver commander and courses of action on how to best apply the fire support system in concert with other operating systems. The maneuver commander provides the required target effects and the priorities for engaging targets and allocating targets.

Wargaming allows the maneuver commander to decide how fire support resources will be used, designates which subordinate echelons will be weighted with fire support, states what targets and target types to attack, and designates what fire support means to use. When the wargaming is complete, the FSO provides the maneuver commander with a fire support plan recommendation to support the selected course of action as well as a positioning and movement plan to ensure firing support elements are able to provide continuous support throughout the operation. The recommended fire support plan will also identify firing support logistical requirements and their impact on the battle.

The process of wargaming integrates the fire support target acquisition systems into the maneuver force battlefield intelligence collection plan (operations and ensures the task force uses the proper fire support means to engage targets).

Commander's Guidance

Development of a successful fire support plan is dependent on the maneuver commander's guidance.

The maneuver commander must state the role that fire support is to play in the overall operation.

The commander defines the areas where indirect fires are to be planned, engagement areas where fires must support maneuver, and any areas critical to the battlefield that require fire support.

Target Priorities

The maneuver commander on today's battlefield faces more targets than he has weapons systems to attack them. To prevent the overloading of the fire support system with targets, a method of prioritizing targets is necessary.

Using the attack criteria established by the maneuver commander, the FSCoord and the FSO must prioritize targets in relation to their impact on the battle. The highest priority targets are those that if not defeated can inhibit the execution of the maneuver commanders battle plan. The next priority of targets are those that may seriously interfere with the battle plan. The lowest priority targets are those that might seriously interfere with the battle plan later in the battle, or disrupt future plans, and those targets that have limited impact on the plan or are very low payoff to the maneuver commander.

The maneuver commander reviews the recommendation of the FSO along with the available ammunition and delivery means and determines the desired effect by category or suppression, neutralization, or destruction.

Briefbacks

The most effective method of insuring that the commander's guidance is understood is for the FSO to briefback his understanding of the commanders fire support guidance to the maneuver commander. This ensures that the FSO understands how the maneuver commander sees how fire support will be used in the operation.

Only after the commander's guidance and intent is clearly defined and understood can the FSCoord and the FSO conduct their planning, wargaming, and rehearsing of the operation with the commander and his battle staff.

Fire Support Plan Rehearsals

Throughout the planning and preparation phases of the operation the maneuver commander and the FSO continually work to focus and refine the plans that the organization is preparing to defeat the enemy. The final step in the development of the fire support plan is the combined arms rehearsal.

How the rehearsal looks is not as important as what it accomplishes. The rehearsal will be more effective if all of the battlefield operating systems are included. The maneuver commander and subordinate commanders, as well as the FSO must rehearse the fire support plan at the same time as the maneuver plan.

A rehearsal is an effective tool for identifying and refining battle plans. The keys to an effective rehearsal are that:

- a. The positioning and movement plans of the artillery units are exercised.
- b. The target acquisition plan is verified.
- c. The fire support plan is validated with the scheme of maneuver, the commander's intent, and attack guidance.
- d. The obstacle/barrier plan of the maneuver force is part of the fire support plan.
- e. The fire and maneuver control measures for protecting and controlling aerial and ground forces do not disrupt the fire support plan, and are not violated by the plan.
- f. Target grids and trigger points are verified.
- g. Redundant observers to initiate fires if the primary observer fails to execute.

The rehearsal provides the FSCOORD and the FSO with an opportunity to identify gaps in the fire plan, potential engagement areas that were not found during the initial planning and wargaming process, and obstacles or barriers that are not covered with fires. The FSO should also use the rehearsal to identify targets that cannot be observed without the use of remote sensors.

The FSO must understand maneuver doctrine, tactics, techniques, and procedures for all battlefield operating systems. He must communicate the capabilities and limitations of fire support to the maneuver force commander and staff. The FSO must articulate the ability of the indirect fire systems to support each course of action to the maneuver commander . . . and the maneuver commander must listen.

The Decision Support Template (DST)

The wargaming process identifies the decision points for the commander. The DST graphically portrays the decision points, and the options available to the commander if an action occurs. The DST provides the FSO with the critical information that is required to provide timely and accurate fires in support of the maneuver force.

Fire Support Execution Matrix

The matrix, when linked to the maneuver execution matrix, provides both the fire support staff, and the maneuver commander with a method of controlling indirect fire during the

battle. Use of the matrix provides a system of controlling fires, a target list and target numbers that are common throughout the force.

The fire support execution matrix like the maneuver execution matrix is event, not time driven. It works like a musical score to bring mortars, field artillery, rocket and all fire support systems in concert with the other operating systems on the battlefield at the needed time and place.

The FSO develops and distributes the fire support execution matrix to the key players on the battlefield. This includes maneuver commanders, staff officers, scouts, fire support personnel, mortar and artillery fire direction centers, and anyone in a position to call for indirect fire during the battle.

In a time sensitive operation, the fire support execution matrix can stand alone to portray graphically the support needed to achieve the commander's intent.

Top-Down Planning

The FSCOORD or FSO do not have the luxury of time to develop a "bottom-up" fire support plan. Operational requirements do not allow the observers to develop, identify, and plan targets or fires in support of the maneuver force, and forward them up through fire support channels for consolidation at each higher level.

The lack of available planning time requires the FSCOORD and FSO to conduct the planning for their subordinate units, and to disseminate the plan down to the units for refinements, adjustments, and execution.

The key to effective employment of "top-down" fire planning is the redundant check of the plan before execution. This is not to imply that company FSOs should not be developing their own fire plan prior to receipt of the task force fire plan and target list. The company/team FSO should use their fire plan to provide the "bottom-up" refinements of the TF fire support plan and target list.

The most critical aspect of the refinement is the verification of target locations by the observer to ensure the accuracy of the fires. Using resection, intersection, or registration, the observers must verify the location of planned targets and coordination measures to ensure the fire supports the intent of the maneuver force commander.

To achieve successful fire support, it is essential that every participant in the fire support system use a common target list. A common target list allows the mortars, artillery, aviation, and maneuver to reference and call fires on the same set of targets.

Shorter Target Lists

The FSO should use the S2s situation template to develop and refine the target list to include only targets that support the operation.

A target list with fewer targets is easier for the observer, commanders and other key personnel in the fire support system to employ. With fewer targets observers are better able to shift fires from planned targets to new targets on the battlefield. The FSCOORD and FSO must insist that every target has a purpose and be tied to the scheme of maneuver and the commander's intent.

Shorter target lists accomplish several key things:

- a. The FSO can ensure that planned targets are based on the target engagement priorities established by the maneuver commander.
- b. The FSCOORD and FSO can quickly consolidate and disseminate the fire support plan and target list.
- c. The FSO can solve or eliminate duplication of targets.
- d. Executing a "shift from a planned target" is quicker than initiating a new call for fire.

8. **CALL 90-3 "The Stone Forest" – May 90**

Fire support must be integrated with the unit's scheme of maneuver and its surveillance and target acquisition efforts. The fire support system must be flexible enough to supply conventional fires without interruption as the tactical situation changes.

9. **CALL 90-5, Fire Support Lesson Learned – May 90**

Planning Lessons Learned: Use Top-Down Fire Planning with Bottom-Up Refinement

FOs and FSOs at lower levels must verify and refine the plan, their assigned targets, and positioning to ensure they can execute fires needed to support to commander's intent.

Execution Lesson Learned: A Fire Support Execution Matrix Is an Essential Tool for Briefing and Executing the Fire Plan

The fire support execution matrix is a concise, easy, planning and executing tool that shows the many factors of a complex fire support plan. The matrix assists the FSO and maneuver commander in understanding how the fire plan supports the scheme of maneuver and the commander's intent.

The matrix explains the portion of the fire support plan each FSO, FO, and maneuver commander are responsible for executing. Not only does it describe what and who, it also describes when (by phase/event) where and how.

When approved by the maneuver commander, the matrix becomes the primary execution tool for the FSO, FO, and maneuver commanders. It is particularly useful in fixing responsibility for execution. It can use maneuver control measures such as target reference points or checkpoints to help integrate maneuver and fire.

The fire support execution matrix must be event driven, not based on time. This amplifies the importance of close cooperation between the FSO and the maneuver and artillery S2s. IPB reveals possible and likely enemy locations, avenues of approach, and provides the initial framework for developing the fire plan.

Planning Lesson Learned: The FSCOORD and FSO Must Explain Field Artillery Combat Power In Terms the Maneuver Commander Understands

The FSCOORD and FSO must explain FA combat power, limitations and capabilities of the fire support system, and how artillery and mortars can best support the operation. FSO

must be able to state whether they can support the mission, and if not, why not. The FSCOORD and FSO must be able to express the capabilities and limitations of the fire support system in terms that the maneuver commander, his staff, and subordinate commanders, understand.

- a. Minutes of smoke, not just number of smoke rounds available.
- b. Number of available RAAM/ADAM minefields by type, size and density. Safety zone around each; the time to emplace each, not the number of rounds.
- c. Battalion volleys by type of ammunition, and what effects the maneuver commander can expect from each volley given specific targets description, not just the number of DPICM or HE rounds available.
- d. Range and artillery area coverage based on the preponderance of the shell/fuze/charge combinations available, not just the maximum range of the system.
- e. The need for timely and accurate target locations.

The briefback is used at the end of the staff planning process. A briefback is used by the FSCOORD or FSO to tell the maneuver commander how fire support will accomplish the commander's stated and implied missions. It summarizes the FSCOORD's or FSO's mission analysis and concept of fire support. The briefback is an efficient way to advise the commander and assure him his guidance has been met. The briefback must communicate essential information without overloading the commander with details he does not need:

- a. State objective; what fire support will accomplish for the commander's plan. This can be summarized in terms of fire support roles with a general characterization of desired effects on target.
- b. State essential tasks; identify the principal means the fire plan uses to achieve the objective. Summarize the high points of the plan such as: number of targets; schedules; special missions such as FASCAM, smoke or illumination.
- c. State constraints on the plan; identify factors impacting on the execution of fires such as availability of ammunition; special missions such as FASCAM or smoke; communications requirement; and fire units repositioning times.
- d. Summarize execution; review the fire support matrix. State: who is responsible for firing each target; what coordination is required; what support from the maneuver force is necessary to accomplish the execution of the fire support plan.
- e. State objectives for contingencies and foreseeable future operations. Unless an unusual amount of time is available for the briefing, don't cover them in detail. These objectives are the first part of the planning guidance for subsequent operations.

Planning Lesson Learned: The FSCOORD and FSO Must Manage the Length of Target Lists Submitted for Formal Fire Planning

Target lists should be short with ten or twenty targets per battalion TF. FSOs who insist every target have a purpose and tied to the scheme of maneuver and the commander's intent end up with quality target lists, not "measle sheets."

FSOs should use situational templates from IPB to develop targets for target lists. Shorter, well-managed lists are best for several reasons:

- a. Reduces the processing time for TACFIRE.
- b. Firing units have more time to compute firing data for planned targets.
- c. FA battalion TOC will have time to determine when and if it will have to move fire units to range planned targets.
- d. Provides more time to ensure coordination across maneuver boundaries, if necessary.
- e. Permits more time to ensure that targets planned by the FSOs are based on the target engagement priorities established by the brigade/battalion commander in his intent.
- f. Facilitates reproduction and distribution of the fire support plan, as well as a realistic division of responsibility between maneuver and fire support for servicing the targets.

The number of targets planned to support any maneuver operation should be METT-T dependent.

Preparation Lesson Learned: Establish and Enforce a Cutoff Time for Submitting Routine Changes to the Target List

A reasonable cutoff time is five hours to crossing the LD or anticipated beginning of defensive operations. Emergency and critically important changes identified prior to the start of an operation should be made if they will have an adverse effect on the operation. Changes that do not effect the outcome of the operation should not be made.

The effect of limiting the time for submitting changes is the same as controlling the number of planned targets: It gives more time to check data; better preparation for the mission; more time for dissemination of the fire plan; and more time to wargame and rehearse.

Preparation Lesson Learned: Never Pass Up an Opportunity to Rehearse

Rehearsals are an integral part of the planning process. The rehearsal should both practice and test the plan. If at all possible, the fire support/artillery rehearsal should be conducted with the maneuver commanders rehearsal. A combined rehearsal will improve responsiveness of fires and synchronization of all the maneuver commanders battle resources.

At any level, fire support participants in the maneuver commander's rehearsal should include all members of the fire support cell, and all subordinate fire support element.

A rehearsal is a run-through of the operation that both practices and tests it enough to be executed. At the end of an effective, rehearsal, everyone should know their responsibilities and the cues for action. The commander should also know if the plan is viable. A rehearsal presupposes a complete plan; that is, a plan complete enough to be executed. Completion is what distinguishes a plan under rehearsal from one being wargamed.

If planning is well-organized, many plans and subplans can be rehearsed concurrently. When time is limited, pick out the plans that need attention and can be checked and fixed in the time available.

If the maneuver commander does not conduct a combined rehearsal, and rehearsal time is available, the FSO should conduct a fire support rehearsal using the maneuver force

operation order (OPORD), fire support plan, fire support execution matrix, and the field artillery support plan. A rehearsal conducted with only fire support personnel only is still better than no rehearsal at all.

As a minimum rehearse the following:

- a. Fire Support Plan: Verify target locations, trigger positions/lines, primary and backup observers/target executors, primary and backup communications channels, target engagement criteria, target priority, purpose, method of engagement, attack guidance, and fire support coordination measures.
- b. Target Acquisition Plan: Verify target priorities, queuing agents, queuing criteria, timeliness and accuracy requirements, who targets, what information is reported to whom, target selection standards, sectors or responsibility/zones of search, positioning/movement plans.
- c. Reconnaissance and Surveillance Plan: Same as those for Target Acquisition Plan.
- d. Communications-Electronics Plan: Verifies SOI instructions, TACFIRE subscriber list, jamming procedures and requirements.

Preparation Lesson Learned: The FSCoord/FSO Should be Where He Can Contribute Most to the Success of the Operation

BN TF Level and Below

The battalion or company FSO facilitates fire support by accompanying the maneuver commander for all phases of planning. Every coordination meeting, orders briefing, or briefback the commander attends also required the FSO's active participation. During execution, an FSO does not always have to stay beside the maneuver commander. The tactical requirement is responsiveness, not proximity.

The key consideration is not whether the TF FSO is located directly with or adjacent to his commander, but whether he can accomplish his mission within the commander's intent from wherever he locates. The FSO's primary roles are as a planner and executor. He must be where he can communicate with his fire supporters and effect changes in priorities, allocation of assets, and assists in the battle as directed by the maneuver commander.

If the maneuver commander assigns the FSO secondary missions as his primary or redundant shooter for a particular engagement, he should be as close to the commander as possible. If his mission is to fire a series or group of targets as part of the larger plan, he must position himself where he can observe his targets and still remain within communications distance of this commander.

Preparation Lesson Learned: The FSO and Forward Observers Must Verify the Location of Obstacles and Plan Fires on or Around Them

FOs and FSOs must verify obstacle locations and plan fires on or around them. The countermobility effort is an integrated task in which the FSO supports the engineer. Neither planning or execution of fires or obstacles can be done in a vacuum. Battlefield synchronization mandates both the engineer and the FSO work together and advise each other on the respective capabilities and limitations. The FSO and engineer must integrate obstacles with the fire plan so the unit can attack enemy forces breaching or attempting to bypass friendly obstacles.

The FSO assigns targets planned on and around obstacles to an observer who can call for fire when the enemy reaches the obstacle. FSOs often plan targets around obstacles but fires are often ineffective due to observers not being able to see the obstacle, or the obstacle location was not verified after it was emplaced.

Position Forward Observers Where They Can See That Portion of the Battlefield for Which They are Responsible

The maneuver commander and FSO must determine the best locations for their platoon forward observers. The most frequently overlooked element of the indirect fire system is location of the forward observer in relation to the targets. The TF and CO/TM FSOs share responsibility for positioning platoon FOs and available COLTs where they can see those targets they are responsible for shooting.

If a platoon FO has been given responsibility for initiating fire supporting an obstacle, he must be positioned where he can both see the target and communicate with the delivery unit responsible for engaging those targets.

The maneuver commander's (Co, TF, or BDE) METT-T analysis must drive where observers will be positioned and what functions/responsibilities each has. Platoon FOs and COLTs can be assigned responsibility for target engagement or surveillance of a particular portion of the battlefield at BDE, TF, or Co level. It is incumbent upon the Co FSO to ensure his platoon forward observation parties are positioned to execute their responsibilities regardless of who assigns the tasks.

Observers and fire support must maintain effective communications to deliver timely and accurate fires on the enemy. Digital equipment must have electronic line of sight in order to pass traffic. Positioning of observers and FSOs must consider both their need to see the battlefield and to communicate.

Position observers where they can see their targets and maintain communications with their indirect fire assets. Careful consideration must be given when separating a platoon forward observation party from the supported platoon. The platoon observation party has only one radio and cannot maintain contact with the platoon leader and the supporting indirect fire unit.

The forward observer regardless of assigned tasks or where he is positioned, must be able to see the battlefield to get effective fires. If this requires separating the FO party from the platoon leader then careful planning and risk assessment must be done to overcome the disadvantages this creates on the maneuver force.

Execution Lesson Learned: FSO Must be Aggressive

FSOs, particularly at company level, must be aggressive!! This means they must plan in the absence of detailed guidance, supervise their subordinates, and above all, react to the changing situation on the battlefield. They cannot sit by passively, unable to observe or communicate, while they wait for their commander to tell them to move. They must take the initiative to bring fire on the enemy. Although the maneuver commander should state his intent for fire support, a good FSO will be able to devise an adequate plan on the basis of a general understanding of the operation.

Execution Lessons Learned: Forward Observers and FSOs Must Know Maneuver Boundaries and Other Control Measures

FSOs and platoon FOs must be familiar with maneuver boundaries to prevent firing across boundaries into another unit's area. FSOs must be aware of the limitations boundaries impose on their planning. Failure to pay attention to boundaries is the second most common cause of fratricides.

Execution Lessons Learned: Know and Report the Location of the Maneuver Force

The greatest unnecessary risk that confronts the soldier on the battlefield is fratricide. To minimize the risk it is essential that the location of friendly elements be kept current and that each target be checked to ensure that fires not be brought down upon friendly elements.

Planning Lessons Learned: Copperhead and FASCAM Must be Planned Carefully and Used Against High Payoff Targets

Copperhead

Copperhead (CPHD) is a highly specialized munition that requires a great deal of planning for successful employment. When employed correctly it can have a devastating effect on enemy formations. Units have their greatest success with Copperhead when they use it in preplanned areas against clearly defined high payoff targets.

FASCAM

Frequently maneuver commanders must plan for the use of FASCAM (Family of Scatterable Mines). Although the term FASCAM includes a wide variety of delivery systems (tactical air, Army aviation, artillery, and ground emplaced), artillery delivered remote anti-armor (RAAM) and area denial artillery munitions (ADAM) are the most responsive to the need of the maneuver commander. The artillery delivered systems are also very effective in shaping the battlefield.

As with any obstacle system, the engineer is the staff proponent for planning the employment of FASCAM. The FSO and FSCOORD must coordinate with the engineer in planning and coordinating FASCAM. The FSO can work out the inconsistencies between the planning and logistics estimates.

Execution Lessons Learned: Use Artillery Illumination to Facilitate Direct Fire Weapons at Night

Whether the heavy maneuver TFs are modernized or non-modernized, they benefit from illumination. The widespread fear that illumination washes out thermal sights and other night vision devices appears wholly unfounded. Experience during live fire exercises shows that maneuver TFs fire more and more accurately when they use artillery illumination.

10. CALL 93-4: Combat Training Centers (CTCs) Bulletin — Jul 93

Fire support may be rehearsed with the subordinate battalion and company FSOs rehearsing their planned fire missions at the appropriate time and place. Enemy events and a general chronology of critical friendly events trigger actions at the rehearsal. The sequence should usually be enemy actions, acquisition of these actions, and friendly fire support actions.

TFs must plan for fire support from the line of departure to actions on the objective. Successful units plan for smoke and suppressive fires to deny enemy observation during the movement to the objective. OPFOR observation posts (OPs) continually destroy considerable TF combat power with indirect fire prior to the unit's arrival at the objective. Units generally do not completely suppress observed obstacles during breaching operations. During the assault on the objective, the execution of fire tends to become disconnected from the scheme of maneuver.

S2s and Fire Support Officers (FSOs) must be trained to develop the reconnaissance and surveillance plans and fire plan together. The S2 must template and develop named areas of interest (NAIs) for all OPs and command observation posts (COPs); obstacles; MRPs; potential reserve platoons and antitank ambushes. At the same time, the FSO must put the named areas of interest (NAI) into the fire plan as targets. Together, the S2 and FSO must track the results of reconnaissance to confirm, update, or deny their NAIs. The fire support element (FSE) must update targets based on reconnaissance. During movement, the TFs must plan to suppress direct fire and use smoke to screen themselves from known and suspected OPs that can affect their courses of action. All obstacles that affect the TFs movement and assault of the objective must be breached, and breached quickly; they require a corresponding fire support plan. Units must practice breach drills with fire support actions included. For obstacle breaches, units must learn to call for indirect suppressive fires on enemy overwatch positions and smoke to screen friendly positions. These fires must be called and in place before the unit leaves its last covered and concealed positions. For smoke, this may mean initiating the call as much as 10 minutes ahead of the unit departing for the breach to ensure that the smoke screen is in place. Most units will not carry enough mortar smoke to do the job, so the use of field artillery smoke must be in the plan. The breaching of the obstacle will probably require 30 minutes of smoke if done correctly. For both the breaching of obstacles and the assault of the objectives, TFs must develop graphic control measures that integrate the movement of forces and the delivery of fires. These graphics must be tied to specific locations on the ground where maneuver forces control the delivery and shifting of fires. Key control measures include limits of advance to designated locations (to shift across the objective). The TF leadership must understand the concept, must train leaders specifically on the call for fire to control the fire plan and identify SOPs for graphic control measures, radio procedures and nets. The rehearsal of fires and maneuver on the objective must be reviewed by company commanders and platoon leaders.

11. **CALL 90-7, Winning in the Desert – Aug 90**

Illumination or smoke rounds can be used to reorient maneuver forces.

The fire support coordinator/FSO is responsible for planning and coordinating all fires in the maneuver area of operations, i.e., mortars, Air Force, Marine Corps, and Navy CAS, naval gunfire, and attack helicopters.

12. **CALL 90-8, Winning in the Desert II – Sept 90**

TOPIC: Use time and variable time-fuzed munitions to kill and point-detonating fuzed munitions to screen

DISCUSSION: The Allies in North Africa and the Israelis found that point-detonating fuzed munitions very often buried themselves in the sand prior to bursting, drastically reducing the casualty producing effect, but the bursts raised large clouds of dust/sand which effectively screened units' movements. The air bursting munitions were more effective casualty producers.

LESSON LEARNED: Artillery units must prepare to use point-detonating high-explosive ammunition to screen unit movements when smoke/white phosphorus ammunition is depleted.

13. **CALL 92-4: Fratricide: Reducing Self-Inflicted Losses – Apr 92**

The RAND Study also investigated indirect fire and found fratricidal missions in 51 of 116 battles reviewed. On average, task forces fired 26.7 missions per battle (excluding smoke and illumination) with 33 percent achieving at least some suppression of forces on the ground. About one tenth of these "effective" missions or 3.6 percent of total missions was fratricidal. Of interest, there was only a small deviation between kinds of operations (offense vs defense) and between units with and without TACFIRE. However, the difference between training in units was significant. The best task forces had fratricidal fire missions in only 25 percent of their battles, while some had friendly indirect fire in every battle. Unfortunately, these figures do not readily translate to casualty estimates for comparison with direct fire casualties.

A recent white paper on this subject from the U.S. Army Field Artillery School states (The Fire Support Element (FSE)) at the maneuver headquarters initiating the request for fires is responsible for obtaining internal clearance (clearance from subordinate units) and, as necessary, clearance from adjacent units in whose areas the target lie." The white paper further details the lack of TTP available to the FSCoord and maneuver commander. Although doctrinally acceptable within unit boundaries, passive control (silence is consent) greatly increases the potential for fratricide, due to the assumption of optimal communications and battle tracking. CTC experiences shows that there is no substitution for clearing fires through positive control and "eyes-on-target" observation at the lowest level.

Experience at CMTC shows that fratricide from friendly minefields is a major problem due to lack of coordination, failure to disseminate obstacle plan, and failure to accurately report obstacle locations back up the chain. --- Solutions include training with scatterable minefields in CPXs and FTXs; including minefield locations in you liaison officer (LO) checklist; and development of a "flash" traffic format or quick report format similar to NBC reports. Note that any use of FASCAM (and possibly some use of dud-producing submunitions) requires appropriate reporting.

During Operation DESERT STORM, the combined dud rate of multiple engagements with improved conventional munitions (APICM, DPICM, CBUs) caused obstacles and safety concerns for the maneuver commander. --- Commanders can create Restricted Fire Areas (RFAs) where they anticipate subsequent maneuver to control this problem. Dud-producing missions would then require coordination with the maneuver headquarters.

LESSONS LEARNED INTEGRATED INTO CCF 15 TASK LIST

PLANNING

1. Direct and lead the task force during planning for the battle
2. Receive ORDER from higher headquarters

The battalion or company FSO facilitates fire support by accompanying the maneuver commander for all phases of planning. Every coordination meeting, orders briefing, or briefback the commander attends also required the FSO's active participation.

3. Conduct mission analysis

FSOs, particularly at company level, must be aggressive!! This means they must plan in the absence of detailed guidance, supervise their subordinates, and above all, react to the changing situation on the battlefield. They cannot sit by passively, unable to observe or communicate, while they wait for their commander to tell them to move. They must take the initiative to bring fire on the enemy. Although the maneuver commander should state his intent for fire support, a good FSO will be able to devise an adequate plan on the basis of a general understanding of the operation.

The fire support coordinator/FSO is responsible for planning and coordinating all fires in the maneuver area of operations, i.e., mortars, Air Force, Marine Corps, and Navy CAS, naval gunfire, and attack helicopters.

4. Issue the Warning Order
5. Commander issues guidance

Specific guidance from battalion concerning where, when, and what to shoot rather than a allocation of priorities to specific companies is often the most effective method of synchronizing fires with maneuver.

Effective fire support starts with, and is the responsibility of, the commander of the maneuver force. Before the battle staff or the fire support staff begins planning the commander must first articulate his intent and guidance for the operation.

The maneuver commander's intent is the foundation that drives the process of planning, preparing, and executing the battle. The commander's guidance and intent provide the basis for collection of information, development of the scheme of maneuver and fire support, and integrating the combat power of the seven operating systems into a cohesive, synchronized force.

Development of a successful fire support plan is dependent on the maneuver commander's guidance.

The maneuver commander must state the role that fire support is to play in the overall operation.

The commander defines the areas where indirect fires are to be planned, engagement areas where fires must support maneuver, and any areas critical to the battlefield that require fire support.

The most effective method of insuring that the commander's guidance is understood is for the FSO to briefback his understanding of the commanders fire support guidance to the maneuver commander. This ensures that the FSO understands how the maneuver commander sees how fire support will be used in the operation.

Only after the commander's guidance and intent is clearly defined and understood can the FSCoord and the FSO conduct their planning, wargaming, and rehearsing of the operation with the commander and his battle staff.

6. Prepare staff estimates

FSOs and platoon FOs must be familiar with maneuver boundaries to prevent firing across boundaries into another unit's area. FSOs must be aware of the limitations boundaries impose on their planning. Failure to pay attention to boundaries is the second most common cause of fratricides.

The FSCoord or FSO do not have the luxury of time to develop a "bottom-up" fire support plan. Operational requirements do not allow the observers to develop, identify, and plan targets or fires in support of the maneuver force, and forward them up through fire support channels for consolidation at each higher level.

The lack of available planning time requires the FSCoord and FSO to conduct the planning for their subordinate units, and to disseminate the plan down to the units for refinements, adjustments, and execution.

7. Staff develops courses of action

The fire plan should originate at task force level and then be modified and expanded based upon company input. Given that there is never sufficient artillery to do all things, a centralized approach guards against the risk of firing a few rounds at a large number of low priority targets. The preferred solution is a lot of rounds on a few particularly critical targets.

The fire support plan is far more than a target list or schedule of fires. It is an articulation of how supporting fires are to be employed with the other elements of combat power to accomplish the mission. The timing of maneuver and fires must be developed and then fully explained. "Priority of artillery fires to Team B. See target list." simply does not cut it.

Artillery illumination should be planned for all night operations, even when the primary concept calls for no illumination. Plans need to delineate specific conditions which will trigger the use of illumination and who will make the decision. Even when gunners can acquire targets with night sights, leaders often need illumination to facilitate command and control and fire distribution.

Maintaining Proficiency of the Basic Skills

During the planning sequence, the TF FSO must develop a maneuver battalion voice fire support net and in conjunction with the FA BN S3, a voice fire direction net to be utilized during emergencies. Once the dedicated voice nets are established, a unit must rehearse these techniques and procedures to ensure execution during the battle. The TF FSO must ensure that all leaders know what frequencies and call signs to use.

Fire planning must be a continuous process to be successful. Decentralization (informal) planning, like centralized (formal) planning, is a product of the situation, the time available, and the echelon at which it occurs. Fire planning should be both formal and informal, regardless of the time available, to be executable and successful.

Fire Support Planning

Fire support planning is conducted concurrently as the maneuver force conducts its battle planning, and determines how, when, and with what means targets will be attacked in support of the maneuver force.

The fire support plan includes how fire support elements will move and position themselves, their tactical deception and survivability plans, the survey and target acquisition plans, and how the fires will be allocated to the maneuver force.

8. Staff/Commander analyze courses of action

Location of FOs/FSOs

Problem: Frequently cited as one of the problems facing units on the battlefield is disagreement over the location of fire support personnel relative to their supported maneuver commanders. Successful tactics, techniques, and procedures:

- a. The tactical requirement is for the FSO to be responsive to or, in some cases, under the control of the maneuver commander he supports. The key consideration is whether his location enables him to accomplish his mission. If his primary function during a battle is to be the commander's FO, he should be as close to the maneuver commander as possible, while maintaining observation of the battalion area. If his mission is to fire a series or group of planned targets as part of the overall fire plan, the FSO must observe those targets at all times and remain responsive to the maneuver commander throughout the entire battle.
- b. Commanders and FSOs should work together to determine the best location for the observers. They share responsibility for positioning them where they can see the battlefield and contribute to the operation's success. The FO must select observation posts and movement routes to support the maneuver commander's scheme of maneuver. The FSO must apply the factors of METT-T to determine optimal positions for his observers.

Target Priorities

The maneuver commander on today's battlefield faces more targets than he has weapons systems to attack them. To prevent the overloading of the fire support system with targets, a method of prioritizing targets is necessary.

Using the attack criteria established by the maneuver commander, the FSCoord and the FSO must prioritize targets in relation to their impact on the battle. The highest priority targets are those that if not defeated can inhibit the execution of the maneuver commanders battle plan. The next priority of targets are those that may seriously interfere with the battle plan. The lowest priority targets are those that might seriously interfere with the battle plan later in the battle, or disrupt future plans, and those targets that have limited impact on the plan or are very low payoff to the maneuver commander.

The maneuver commander reviews the recommendation of the FSCoord along with the available ammunition and delivery means and determines the desired effect by category or suppression, neutralization, or destruction.

Assign targets (high value targets, groups, series, etc.) to a commander for execution, not to the FSO. In most cases, the FSO is going to be co-located with the commander and will actually do the requesting and adjusting. The smarter maneuver commander ensures his subordinates know how the fire plan is synchronized with the battle plan. A maneuver company commander, given the mission to fire group A1B at PL RED, will certainly be at the right place, at the right time to do just that. He will also probably ensure his FSO has good communications with the FDC and the mission goes as planned.

Wargaming

Upon receipt of the commander's guidance, the commander, FSO, maneuver S3, and staff set about to develop the operations order. A critical step in building the foundation for the operations order is wargaming of the mission by the commander and staff. Wargaming allows the maneuver commander to analyze and evaluate various courses of action to determine how best to defeat and destroy the enemy.

As the maneuver commander wargames the operation, the FSO provides the most current information for applying all elements to the fire support system. The FSO recommends options to the maneuver commander and courses of action on how to best apply the fire support system in concert with other operating systems. The maneuver commander provides the required target effects and the priorities for engaging targets and allocating targets.

Wargaming allows the maneuver commander to decide how fire support resources will be used, designates which subordinate echelons will be weighted with fire support, states what targets and target types to attack, and designates what fire support means to use. When the wargaming is complete, the FSO provides the maneuver commander with a fire support plan recommendation to support the selected course of action as well as a positioning and movement plan to ensure firing support elements are able to provide continuous support throughout the operation. The recommended fire support plan will also identify firing support logistical requirements and their impact on the battle.

The process of wargaming integrates the fire support target acquisition systems into the maneuver force battlefield intelligence collection plan (operations and ensures the task force uses the proper fire support means to engage targets).

The FSO must understand maneuver doctrine, tactics, techniques, and procedures for all battlefield operating systems. He must communicate the capabilities and limitations of fire support to the maneuver force commander and staff. The FSO must articulate the ability of the indirect fire systems to support each course of action to the maneuver commander . . . and the maneuver commander must listen.

The maneuver commander's (Co, TF, or BDE) METT-T analysis must drive where observers will be positioned and what functions/responsibilities each has. Platoon FOs and COLTs can be assigned responsibility for target engagement or surveillance of a particular portion of the battlefield at BDE, TF, or Co level.

Fire support must be integrated with the unit's scheme of maneuver and its surveillance and target acquisition efforts. The fire support system must be flexible enough to supply conventional fires without interruption as the tactical situation changes.

FSOs should use situational templates from IPB to develop targets for target lists.

FOs and FSOs must verify obstacle locations and plan fires on or around them. The counter-mobility effort is an integrated task in which the FSO supports the engineer. Neither planning or execution of fires or obstacles can be done in a vacuum. Battlefield synchronization mandates both the engineer and the FSO work together and advise each other on the respective capabilities and limitations. The FSO and engineer must integrate obstacles with the fire plan so the unit can attack enemy forces breaching or attempting to bypass friendly obstacles.

The FSO assigns targets planned on and around obstacles to an observer who can call for fire when the enemy reaches the obstacle. FSOs often plan targets around obstacles but fires are often ineffective due to observers not being able to see the obstacle, or the obstacle location was not verified after it was emplaced.

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Copperhead (CPHD) is a highly specialized munition that requires a great deal of planning for successful employment. When employed correctly it can have a devastating effect on enemy formations. Units have their greatest success with Copperhead when they use it in preplanned areas against clearly defined high payoff targets.

FASCAM

Frequently maneuver commanders must plan for the use of FASCAM (Family of Scatterable Mines). Although the term FASCAM includes a wide variety of delivery systems (tactical air, Army aviation, artillery, and ground emplaced), artillery delivered remote anti-armor (RAAM) and area denial artillery munitions (ADAM) are the most responsive to the need of the maneuver commander. The artillery delivered systems are also very effective in shaping the battlefield.

As with any obstacle system, the engineer is the staff proponent for planning the employment of FASCAM. The FSO and FSCoord must coordinate with the engineer in planning and coordinating FASCAM. The FSO can work out the inconsistencies between the planning and logistics estimates.

Whether the heavy maneuver TFs are modernized or non-modernized, they benefit from illumination. The widespread fear that illumination washes out thermal sights and other night vision devices appears wholly unfounded. Experience during live fire exercises shows that maneuver TFs fire more and more accurately when they use artillery illumination.

TFs must plan for fire support from the line of departure to actions on the objective. Successful units plan for smoke and suppressive fires to deny enemy observation during the movement to the objective. OPFOR observation posts (OPs) continually destroy considerable TF combat power with indirect fire prior to the unit's arrival at the objective. Units generally do not completely suppress observed obstacles during breaching operations.

During the assault on the objective, the execution of fire tends to become disconnected from the scheme of maneuver.

S2s and Fire Support Officers (FSOs) must be trained to develop the reconnaissance and surveillance plans and fire plan together. The S2 must template and develop named areas of interest (NAIs) for all OPs and command observation posts (COPs); obstacles; MRPs; potential reserve platoons and antitank ambushes. At the same time, the FSO must put the named areas of interest (NAI) into the fire plan as targets. Together, the S2 and FSO must track the results of reconnaissance to confirm, update, or deny their NAIs. The fire support element (FSE) must update targets based on reconnaissance.

During movement, the TFs must plan to suppress direct fire and use smoke to screen themselves from known and suspected OPs that can affect their courses of action. All obstacles that affect the TFs movement and assault of the objective must be breached, and breached quickly; they require a corresponding fire support plan. Units must practice breach drills with fire support actions included. For obstacle breaches, units must learn to call for indirect suppressive fires on enemy overwatch positions and smoke to screen friendly positions. These fires must be called and in place before the unit leaves its last covered and concealed positions. For smoke, this may mean initiating the call as much as 10 minutes ahead of the unit departing for the breach to ensure that the smoke screen is in place. Most units will not carry enough mortar smoke to do the job, so the use of field artillery smoke must be in the plan.

The breaching of the obstacle will probably require 30 minutes of smoke if done correctly. For both the breaching of obstacles and the assault of the objectives, TFs must develop graphic control measures that integrate the movement of forces and the delivery of fires. These graphics must be tied to specific locations on the ground where maneuver forces control the delivery and shifting of fires. Key control measures include limits of advance to designated locations (to shift across the objective). The TF leadership must understand the concept, must train leaders specifically on the call for fire to control the fire plan and identify SOPs for graphic control measures, radio procedures and nets. The rehearsal of fires and maneuver on the objective must be reviewed by company commanders and platoon leaders.

9. Staff compares courses of action

The Maneuver Commander Is the Owner of the Fire Support Plan

He must synchronize and concentrate all of his combat power at the critical time and place. Synchronizing and integrating the battlefield operating system is fundamental to success on the battlefield.

The maneuver commander is responsible for integrating fire support and the scheme of maneuver into the concept of operation.

The FSCoord and his FSO assist and advise the commander in planning, preparing and executing the fire support plan. The maneuver commander must understand his responsibility for the fire support plan from the very beginning to the end of the process.

10. Commander announces decision

Communications Between the Commander and FSO is an Art

Communications between the TF commander and his FSO is critical. If there is a misunderstanding, it will probably not be obvious until the execution commences. The FSO must communicate his thoughts in a language the commander will understand. For example, the FSO should tell him how many minutes of smoke (HC) are available, not how many rounds; or firing a preplanned 400m x 400m (medium) FASCAM minefield takes 7–12 minutes to fire and with displacement to an alternate position may result in the TF being unable to use its artillery for 45 minutes to one hour on other missions.

The briefback is used at the end of the staff planning process. A briefback is used by the FSCoord or FSO to tell the maneuver commander how fire support will accomplish the commander's stated and implied missions. It summarizes the FSCoord's or FSO's mission analysis and concept of fire support. The briefback is an efficient way to advise the commander and assure him his guidance has been met. The briefback must communicate essential information without overloading the commander with details he does not need:

- a. State objective; what fire support will accomplish for the commander's plan. This can be summarized in terms of fire support roles with a general characterization of desired effects on target.
- b. State essential tasks; identify the principal means the fire plan uses to achieve the objective. Summarize the high points of the plan such as: number of targets; schedules; special missions such as FASCAM, smoke or illumination.
- c. State constraints on the plan; identify factors impacting on the execution of fires such as availability of ammunition; special missions such as FASCAM or smoke; communications requirement; and fire units repositioning times.
- d. Summarize execution; review the fire support matrix. State: who is responsible for firing each target; what coordination is required; what support from the maneuver force is necessary to accomplish the execution of the fire support plan.
- e. State objectives for contingencies and foreseeable future operations. Unless an unusual amount of time is available for the briefing, don't cover them in detail. These objectives are the first part of the planning guidance for subsequent operations.

11. Staff prepares OPORD/FRAGO

The fire support execution matrix, the linkage of targets to systems and the identification of specifically who is to shoot by phase of battle, is a very effective tool. Responsibility for each target to include identification on the ground, observation, execution, and adjustment as necessary is given to a specific unit, e.g., company team, scout platoon. Sufficient redundancy is required to guard against obscurity and casualties.

Fire Support Execution Matrix – A Valuable Tool

Target lists that consist of quality targets and not quantity are more likely to succeed. These target lists must support the commander's concept.

The Decision Support Template (DST)

The wargaming process identifies the decision points for the commander. The DST graphically portrays the decision points, and the options available to the commander if an action occurs. The DST provides the FSO with the critical information that is required to provide timely and accurate fires in support of the maneuver force.

Fire Support Execution Matrix

The fire support execution matrix like the maneuver execution matrix is event, not time driven. It works like a musical score to bring mortars, field artillery, rocket and all fire support systems in concert with the other operating systems on the battlefield at the needed time and place.

In a time sensitive operation, the fire support execution matrix can stand alone to portray graphically the support needed to achieve the commander's intent.

To achieve successful fire support, it is essential that every participant in the fire support system use a common target list. A common target list allows the mortars, artillery, aviation, and maneuver to reference and call fires on the same set of targets.

The FSO should use the S2s situation template to develop and refine the target list to include only targets that support the operation.

The fire support execution matrix is a concise, easy, planning and executing tool that shows the many factors of a complex fire support plan. The matrix assists the FSO and maneuver commander in understanding how the fire plan supports the scheme of maneuver and the commander's intent.

The matrix explains the portion of the fire support plan each FSO, FO, and maneuver commander are responsible for executing. Not only does it describe what and who, it also describes when (by phase/event) where and how.

When approved by the maneuver commander, the matrix becomes the primary execution tool for the FSO, FO, and maneuver commanders. It is particularly useful in fixing responsibility for execution. It can use maneuver control measures such as target reference points or checkpoints to help integrate maneuver and fire.

The fire support execution matrix must be event driven, not based on time. This amplifies the importance of close cooperation between the FSO and the maneuver and artillery S2s. IPB reveals possible and likely enemy locations, avenues of approach, and provides the initial framework for developing the fire plan.

Target lists should be short with ten or twenty targets per battalion TF. FSOs who insist every target have a purpose and tied to the scheme of maneuver and the commander's intent end up with quality target lists, not "measle sheets."

A target list with fewer targets is easier for the observer, commanders and other key personnel in the fire support system to employ. With fewer targets observers are better able to shift fires from planned targets to new targets on the battlefield. The FSCOORD and FSO must insist that every target has a purpose and be tied to the scheme of maneuver and the commander's intent.

Shorter target lists accomplish several key things:

- a. The FSO can ensure that planned targets are based on the target engagement priorities established by the maneuver commander.
- b. The FSCOORD and FSO can quickly consolidate and disseminate the fire support plan and target list.
- c. The FSO can solve or eliminate duplication of targets.
- d. Executing a "shift from a planned target" is quicker than initiating a new call for fire.

Shorter, well-managed lists are best for several reasons:

- a. Reduces the processing time for TACFIRE.
- b. Firing units have more time to compute firing data for planned targets.
- c. FA battalion TOC will have time to determine when and if it will have to move fire units to range planned targets.
- d. Provides more time to ensure coordination across maneuver boundaries, if necessary.
- e. Permits more time to ensure that targets planned by the FSOs are based on the target engagement priorities established by the brigade/battalion commander in his intent.
- f. Facilitates reproduction and distribution of the fire support plan, as well as a realistic division of responsibility between maneuver and fire support for servicing the targets.

12. Issue the OPORD/FRAGO

A fire plan formulated and disseminated from higher to lower, will allow the fire plan to be communicated to support the commander's concept but feedback from the lower echelons is vital to refine the plan according to conditions that lower units meet.

Fire Support Execution Matrix and Maneuver Commanders

The fire support execution matrix is an excellent tool for the FSO to explain the fire support plan to the commander.

- a. Give copies of the fire support execution matrix to the Bn/Co commander's, platoon leaders and platoon FOs.
- b. Brief the matrix to those individuals so they understand and visualize the fire support plan and can execute it if required.

The FSO develops and distributes the fire support execution matrix to the key players on the battlefield. This includes maneuver commanders, staff officers, scouts, fire support personnel, mortar and artillery fire direction centers, and anyone in a position to call for indirect fire during the battle.

13. Refine the plan

The TF FSOs should ensure subordinate FSOs establish redundant means to engage targets.

The key to effective employment of "top-down" fire planning is the redundant check of the plan before execution. This is not to imply that company FSOs should not be developing their own fire plan prior to receipt of the task force fire plan and target list. The company/team FSO should use their fire plan to provide the "bottom-up" refinements of the TF fire support plan and target list.

The most critical aspect of the refinement is the verification of target locations by the observer to ensure the accuracy of the fires. Using resection, intersection, or registration, the observers must verify the location of planned targets and coordination measures to ensure the fire supports the intent of the maneuver force commander.

14. FSO and Fire Support Section (FSS) Operations

It is incumbent upon the Co FSO to ensure his platoon forward observation parties are positioned to execute their responsibilities regardless of who assigns the tasks.

The forward observer regardless of assigned tasks or where he is positioned, must be able to see the battlefield to get effective fires. If this requires separating the FO party from the platoon leader then careful planning and risk assessment must be done to overcome the disadvantages this creates on the maneuver force.

15. FSO synchronizes and integrates fire support

The maneuver commander and FSO must determine the best locations for their platoon forward observers. The most frequently overlooked element of the indirect fire system is location of the forward observer in relation to the targets. The TF and CO/TM FSOs share responsibility for positioning platoon FOs and available COLTs where they can see those targets they are responsible for shooting.

If a platoon FO has been given responsibility for initiating fire supporting an obstacle, he must be positioned where he can both see the target and communicate with the delivery unit responsible for engaging those targets.

16. FSO coordinates fire support

A face-to-face meeting between brigade and task force FSOs and the DS Battalion S3 and FDO, where the concepts of operations and intents of the various maneuver commanders are discussed, pays rich dividends.

PREPARATION

17. Command Group Conducts and Receives Briefings

18. Command Group and Command Posts Monitor, Supervise, and Direct Execution of Force Protection Operations and Activities

19. Command Group and Command Posts Monitor, Supervise, and Direct TF Mission Preparation

Observers and fire support must maintain effective communications to deliver timely and accurate fires on the enemy. Digital equipment must have electronic line of sight in order to pass traffic. Positioning of observers and FSOs must consider both their need to see the battlefield and to communicate.

Position observers where they can see their targets and maintain communications with their indirect fire assets. Careful consideration must be given when separating a platoon forward observation party from the supported platoon. The platoon observation party has only one radio and cannot maintain contact with the platoon leader and the supporting indirect fire unit.

20. Commander, Commander's Representatives, and Staff conduct inspections and visits

The preparation phase gives the commander and staff the opportunity to check and verify the plans against the commander's guidance, and to correct all deficiencies before the execution phase.

21. Task Force Rehearsals

Rehearsing a fire plan is no different than wargaming a maneuver commander's concept of the operation. In fact, both require the same thought process and players. This thought process must ensure synchronization of fire support to enhance the maneuver commander's intent of fighting the battle. When rehearsing a fire plan, the following areas must be addressed:

- a. Who is responsible to initiate the mission and over what net?
- b. What is the redundancy in execution?
- c. Who clears fire?
- d. How is the maneuver commander made aware of the voids in fire support due to artillery units moving, mission processing times, etc.?
- e. What are the capabilities and limitations of field artillery?
- f. How many missions can be fired before artillery starts moving?
- g. How many targets of opportunity can be fired without interfering with the execution of the fire plan?

The maneuver commander walks through the concept of the operation and depicts (based on the fire plan) where and when he wants fire support. As the maneuver commander identifies a target:

- a. The person shooting it explains where and when he executes the mission; what net and call signs he uses; and what effect he anticipates on the target.
- b. The alternate shooter addresses the same question.

Use the fire support execution matrix to conduct a fire support rehearsal. The purpose of the rehearsal is to ensure all personnel fully understand their mission and responsibilities in the fire support plan. Ideally, conduct this rehearsal with a maneuver rehearsal. If the commander does not understand the fire support plan, he will not use it. The fire support execution matrix and the rehearsal overcome this problem.

The rehearsal will be more effective if all of the battlefield operating systems are included. The maneuver commander and subordinate commanders, as well as the FSO must rehearse the fire support plan at the same time as the maneuver plan.

A rehearsal is an effective tool for identifying and refining battle plans. The keys to an effective rehearsal are that:

- a. The positioning and movement plans of the artillery units are exercised.
- b. The target acquisition plan is verified.
- c. The fire support plan is validated with the scheme of maneuver, the commander's intent, and attack guidance.
- d. The obstacle/barrier plan of the maneuver force is part of the fire support plan.
- e. The fire and maneuver control measures for protecting and controlling aerial and ground forces do not disrupt the fire support plan, and are not violated by the plan.
- f. Target grids and trigger points are verified.
- g. Redundant observers to initiate fires if the primary observer fails to execute.

The rehearsal provides the FSCoord and the FSO with an opportunity to identify gaps in the fire plan, potential engagement areas that were not found during the initial planning and wargaming process, and obstacles or barriers that are not covered with fires. The FSO should also use the rehearsal to identify targets that cannot be observed without the use of remote sensors.

Rehearsals are an integral part of the planning process. The rehearsal should both practice and test the plan. If at all possible, the fire support/artillery rehearsal should be conducted with the maneuver commanders rehearsal. A combined rehearsal will improve responsiveness of fires and synchronization of all the maneuver commanders battle resources.

At any level, fire support participants in the maneuver commander's rehearsal should include all members of the fire support cell, and all subordinate fire support element.

A rehearsal is a run-through of the operation that both practices and tests it enough to be executed. At the end of an effective rehearsal, everyone should know their responsibilities and the cues for action. The commander should also know if the plan is viable. A rehearsal presupposes a complete plan; that is, a plan complete enough to be executed. Completion is what distinguishes a plan under rehearsal from one being wargamed.

If planning is well-organized, many plans and subplans can be rehearsed concurrently. When time is limited, pick out the plans that need attention and can be checked and fixed in the time available.

If the maneuver commander does not conduct a combined rehearsal, and rehearsal time is available, the FSO should conduct a fire support rehearsal using the maneuver force operation order (OPORD), fire support plan, fire support execution matrix, and the field

artillery support plan. A rehearsal conducted with only fire support personnel only is still better than no rehearsal at all.

As a minimum rehearse the following:

- a. **Fire Support Plan:** Verify target locations, trigger positions/lines, primary and backup observers/target executors, primary and backup communications channels, target engagement criteria, target priority, purpose, method of engagement, attack guidance, and fire support coordination measures.
- b. **Target Acquisition Plan:** Verify target priorities, queuing agents, queuing criteria, timeliness and accuracy requirements, who targets, what information is reported to whom, target selection standards, sectors or responsibility/zones of search, positioning/movement plans.
- c. **Reconnaissance and Surveillance Plan:** Same as those for Target Acquisition Plan.
- d. **Communications-Electronics Plan:** Verifies SOI instructions, TACFIRE subscriber list, jamming procedures and requirements.

Fire support may be rehearsed with the subordinate battalion and company FSOs rehearsing their planned fire missions at the appropriate time and place. Enemy events and a general chronology of critical friendly events trigger actions at the rehearsal. The sequence should usually be enemy actions, acquisition of these actions, and friendly fire support actions.

22. Task Force Plan Modified and Refined

Fire Support Planning Timeline

Even though fire planning is a continuous process, there must be a "drop dead" time for making changes to an existing fire plan. A good cut-off time is one hour prior to execution. Naturally, critical changes occur after the "drop dead" time, but adherence to this time allows everyone to make their final preparation.

Throughout the planning and preparation phases of the operation the maneuver commander and the FSO continually work to focus and refine the plans that the organization is preparing to defeat the enemy.

A reasonable cutoff time is five hours to crossing the LD or anticipated beginning of defensive operations. Emergency and critically important changes identified prior to the start of an operation should be made if they will have an adverse effect on the operation. Changes that do not effect the outcome of the operation should not be made.

Establish and Enforce a Cutoff Time for Submitting Routine Changes to the Target List

A reasonable cutoff time is five hours to crossing the LD or anticipated beginning of defensive operations. Emergency and critically important changes identified prior to the start of an operation should be made if they will have an adverse effect on the operation. Changes that do not effect the outcome of the operation should not be made.

23. Command Post (TAC, TOC, CTCP) Operations

Communications between companies, FSOs, and FDCs need to be thoroughly checked before the battle to include necessary corrective action. The location of OPs, obstacles, and reference points require confirmation by resection or PADs to the maximum extent possible. Commanders, subordinate infantry and tank leaders, FOs, and others responsible for specific targets must be able to point them out on the ground. Trigger lines based upon projected enemy routes and movement rates must be clearly identified.

24. Liaison and coordination with higher, adjacent, supported and supporting elements

25. Command Group and Command Posts Position to Control the Battle

EXECUTION

26. TF Command Posts located where they can control the battle

27. TF Commander sees the battlefield

28. TF Commander directs and leads the execution phase

The execution phase of the fire support plan is the prosecution of the maneuver commander's intent. The fire support is the prosecution of the maneuver commander's battle plan.

The fire support execution matrix, when linked to the maneuver execution matrix, provides both the fire support staff, and the maneuver commander with a method of controlling indirect fire during the battle. Use of the matrix provides a system of controlling fires, a target list and target numbers that are common throughout the force.

29. TF Command Posts track and support the battle

During execution, an FSO does not always have to stay beside the maneuver commander. The tactical requirement is responsiveness, not proximity.

The key consideration is not whether the TF FSO is located directly with or adjacent to his commander, but whether he can accomplish his mission within the commander's intent from wherever he locates. The FSO's primary roles are as a planner and executor. He must be where he can communicate with his fire supporters and effect changes in priorities, allocation of assets, and assists in the battle as directed by the maneuver commander.

If the maneuver commander assigns the FSO secondary missions as his primary or redundant shooter for a particular engagement, he should be as close to the commander as possible. If his mission is to fire a series or group of targets as part of the larger plan, he must position himself where he can observe his targets and still remain within communications distance of this commander.

The greatest unnecessary risk that confronts the soldier on the battlefield is fratricide. To minimize the risk it is essential that the location of friendly elements be kept current and that each target be checked to ensure that fires not be brought down upon friendly elements.

30. TF conducts battlefield update

The FSCOORD and FSO must explain FA combat power, limitations and capabilities of the fire support system, and how artillery and mortars can best support the operation. FSO must be able to state whether they can support the mission, and if not, why not. The FSCOORD and FSO must be able to express the capabilities and limitations of the fire support system in terms that the maneuver commander, his staff, and subordinate commanders, understand.

- a. Minutes of smoke, not just number of smoke rounds available.
- b. Number of available RAAM/ADAM minefields by type, size and density. Safety zone around each; the time to emplace each, not the number of rounds.
- c. Battalion volleys by type of ammunition, and what effects the maneuver commander can expect from each volley given specific targets description, not just the number of DPICM or HE rounds available.
- d. Range and artillery area coverage based on the preponderance of the shell/fuze/charge combinations available, not just the maximum range of the system.
- e. The need for timely and accurate target locations.

31. TF conducts the decision making process (accelerated)

32. TF consolidates and reorganizes

33. Execution of synchronized and integrated fire support

...it is important to guard against the tendency to fire preplanned targets when the enemy of somewhere else. Adjustments from preplanned targets or grid missions must be used if that is what it takes to get the fire on the enemy.

While FSOs and FOs play a big role, the effective integration of fire is a command responsibility and there clearly needs to be a lot of non-artillerymen calling for fire. All leaders must know the frequencies and how to make the system work.

TACFIRE tends to back up during battles and it is difficult to override the queuing sequence, in part because the TF FSO forward cannot monitor the fire nets. Non-TACFIRE nets can also become jammed with the stronger stations overriding. In either case, the likely consequence is that fires will not be massed on the highest priority targets. Disciplined fire nets is obviously important. In addition, the establishment of a voice fire coordination net for the task force is recommended. On this net, the FSO passes instructions to company FSOs and his FSE, and he receives feedback on what is happening on fire direction nets. Unless the TF FSO has a net to receive information and pass instructions, he becomes just another FO.

Fire support fails when the FSO or the Fire Support Sergeant become casualties and their subordinates are unable to step in and accomplish the mission. Train your subordinates and then use them in providing effective fire support during periods of continuous operations.

CCF 15
CRITICAL TASKS AND OTHER LINKAGES

<u>TASKS</u>	<u>OTHER LINKAGES</u>
3. Conduct mission analysis	<p>TF FSO (STP 6-13II-MQS)</p> <ul style="list-style-type: none">• Advise Maneuver Commander on Employment of Available Fire Support Assets (01-2999.94-0106)• Advise the Maneuver Commander on Employment of COLTs and Aerial Fire Support Teams (01-2840.00-2039)• Advise the Commander on the Capabilities of Available Target Acquisition Assets (01-3020.00-7002) <p>TF FS NCOs (STP 6-13F14-SM-TG)</p> <ul style="list-style-type: none">• Advise Supported Unit of Friendly Fire Support Capabilities and Limitations (061-284-3004)• Advise Maneuver Commander on Employment of Target Acquisition Assets (061-284-4211)
6. Prepare staff estimates	<p>TF FSO (STP 6-13II-MQS)</p> <ul style="list-style-type: none">• Interpret Threat Organization and Equipment (01-2660.00-2004) <p>TF FS NCOs (STP 6-13F14-SM-TG)</p> <ul style="list-style-type: none">• Analyze the Formations of Threat Forces (061-284-4000)
7. Staff develops courses of action	<p>TF FSO (STP 6-13II-MQS)</p> <ul style="list-style-type: none">• Plan Fire Support Employment (04-3313.03-0002)• Plan Field Artillery Fire Support of Maneuver Units (01-2999.94-0100)• Recommend Fire Support Coordinating Measures (01-2999.94-0101)• Develop a Fire Support Plan to Support a Defensive Operation (01-2660.00-2009)
8. Staff/Commander analyze courses of action	
9. Staff compares courses of action	

TASKS

OTHER LINKAGES

- Develop a Fire Plan to Support an Offensive Operation (01-2660.00-2008)
- Plan, Request, and Direct an Emergency CAS Mission (01-2830.00-3031)
- Explain the Employment of Mortars (01-2840.00-8502)
- Recommend Fire Support Coordinating Measures, and Coordinate Fires (01-2840.00-2042)
- Apply the Fire Support Coordinating Measures (01-2840.00-2025)
- Plan for Emplacement of Special Munitions (01-2840.00-2040)

Infantry TOC Officers (STP 7-11II-MQS)

- Plan Offensive Operations at the Battalion Level (01-3317.04-0004)
- Plan Defensive Operations at the Battalion Level (01-3317.04-0005)

Armor TOC Officers (STP 17-12II-MQS)

- Plan Offensive Operations at the Battalion/Squadron Level (Composite Task)
- Plan Defensive Operations at the Battalion/Squadron Level (Composite Task)

TF FS NCOs (STP 6-13F14-SM-TG)

- Recommend and Disseminate Fire Support Coordination Measures (061-284-4040)
- Plan and Coordinate Fire Support to Suppress Enemy Air Defense (061-284-4209)
- Plan Fire Support for Battalion/Brigade Offensive Operations (061-284-4229)
- Plan Fire Support for Battalion/Brigade Defensive Operations (061-284-4231)
- Plan for the Employment of Smart Weapons and Special Munitions (061-284-4243)

TASKS

OTHER LINKAGES

11. Staff prepares OPORD/FRAGO

- Select and Occupy an Observation Post (061-283-2051)

TF FSO (STP 6-13II-MQS)

- Develop and Write a FA Support Plan (01-2999.94-0104)
- Prepare Target Lists and Scheduling Work Sheets (01-2660.00-2013)
- Direct the Establishment of a Fire Plan in the TACFIRE Computer (01-2770.01-0115)
- Produce an Attack Guidance Matrix (01-2840.00-2038)
- Request and Coordinate Preplanned and Immediate CAS (01-2840.00-2041)
- Produce a High-Payoff Target Matrix (01-2840.00-2044)
- Direct the Establishment of and Verify Commander's Criteria (01-2770.01-0115)

TF FS NCO (STP 6-13F14-SM-TG)

- Write the Fires Paragraph of the Maneuver Operations Order (061-284-4244)
- Produce a High Payoff Target List (061-284-4245)
- Produce an Attack Guidance Matrix (061-284-4246)
- Write the Fire Support Plan (061-284-4247)

12. Issue the OPORD/FRAGO

TF FSO (no MTP/STP reference)

- Brief the Fire Support Plan

TF FS NCO (STP 6-13F14-SM-TG)

- Recommend and Disseminate Fire Support Coordination Measures (061-284-4040)

13. Refine the plan

TF and Co/Tm FSOs (no MTP/STP reference)

TASKS

OTHER LINKAGES

- Update the Fire Support plan based on input from subordinate, adjacent, and supporting fire support elements
- Ensures artillery, mortars, and CAS plans are modified to support the tactical scheme of maneuver

Co/Tm

- STP 7-11II-MQS
 - Plan Fire Support Employment (04-3313.03-0002)
- STP 21-II-MQS
 - Prepare Platoon or Company Combat Orders (04-3303.02-0014)
- ARTEP 71-1-MTP
 - Prepare for Combat (17-2-0101)

Infantry Platoon (ARTEP 7-247-11-MTP)

- Plan and Control Combat Operations (7-3/4-4056)

Armor Platoon (ARTEP 17-237-10-MTP)

- Perform Tactical Planning (17-3-0100)

TF and Co/Tm FS NCOs (STP 6-13F14-SM-TG)

- Produce Company Fire Support Plan (061-284-3226)

Mortar Platoon

- ARTEP 7-90-MTP
 - Plan and Control Combat Operations (7-3/4-1237)
 - Prepare for Combat (7-3/4-1235)
- STP 7-11C14-SM-TG
 - Prepare Mortar Fire Plans (071-074-0017)

TASKS

**14. FSO and Fire Support Section (FSS)
Operations**

OTHER LINKAGES

FSOs (STP 6-13II-MQS)

- Organize and Conduct the Operation of the Fire Support Team (01-2660.00-2007)
- Conduct Digital Communications With the DMD (01-2660.00-2013)
- Conduct Digital Communications With the FIST DMD (01-2660.00-2017)
- Supervise Battalion FSE in a TACFIRE-Equipped Unit (01-2770.01-0139)

FS NCOs/FOs (STP 6-13F14-SM-TG)

- Select and Occupy an Observation Post (061-283-2051)
- Prepare and Submit FO Target List (061-284-1001)
- Process FO Target Lists (061-284-3227)
- Establish FSE Communications (061-284-4221)
- Establish the FIST Headquarters Communications (061-284-3220)

16. FSO coordinates fire support

FSO (STP 6-13II-MQS)

- Coordinate Fire Support for a Maneuver Unit (01-2999.93-0001)
- Coordinate Digital Communications Requirements (01-2770.01-0190)
- Coordinate Employment of FA Target Acquisition Assets (01-2999.94-0103)

FS NCOs (STP 6-13F14-SM-TG)

- Pass Fire Support Information to Lower, Adjacent, and Higher FA Elements (061-284-3046)
- Coordinate Fires (061-284-4022)
- Coordinate Requests for Preplanned CAS (061-284-4031)

TASKS

27. TF Commander sees the battlefield

28. TF Commander directs and leads the execution phase

30. TF conducts battlefield update (METT-T based)

OTHER LINKAGES

Mortar Platoon (ARTEP 7-90-MTP)

- Prepare for Combat (7-3/4-1235)

All Soldiers (STP 21-24-SMCT)

- Prepare a SITREP (071-332-5022)

Co/Tm (no MTP/STP reference)

- Exercise Command and Control during combat

Infantry Platoon (ARTEP 7-247-11-MTP)

- Plan and Control Combat Operations (7-3/4-4056)

Armor Platoon (ARTEP 17-237-10-MTP)

- Employ Command and Control Measures (17-3-0105)

FSO (STP 6-13II-MQS)

- Direct the Evaluation and Dissemination of Intelligence Reports Using TACFIRE (01-2770.01-0114)
- Advise Maneuver Commander on TACFIRE Operations (01-2770.01-0118)
- Advise the Commander on the Capabilities of Available Target Acquisition Assets (01-3020.00-7002)
- Advise Maneuver Commander on Employment of Available Fire Support Assets (01-2999.94-0106)

FS NCOs (STP 6-13F14-SM-TG)

- Advise Maneuver Commander on Employment of Target Acquisition Assets (061-284-4211)

Infantry Platoon (ARTEP 7-247-11-MTP)

- Report (7-3/4-4058)

TASKS

31. TF conducts the decision making process (accelerated)

33. Execution of synchronized and integrated fire support

OTHER LINKAGES

FSO (STP 6-13II-MQS)

- Recommend Fire Support Coordinating Measures (01-2999.94-0101)
- Advise Maneuver Commander on Employment of Available Fire Support Assets (01-2999.94-0106)

FSO (STP 6-13II-MQS)

- Designate a Target Using the Laser Target Designator (01-2740.00-1964)
- Engage a Moving Target with Indirect Fire (01-2660.00-2016)
- Plan, Request, and Direct an Emergency CAS Mission (01-2830.00-3031)
- Coordinate and Request Fire Support From Observers (01-2840.00-2026)
- Direct Processing of the Fire Support Request (01-2770.01-0133)
- Request and Coordinate Preplanned and Immediate CAS (01-2840.00-2041)
- Recommend Fire Support Coordinating Measures, and Coordinate Fires (01-2840.00-2042)
- Conduct Fire Support Employment (04-3313.02-0001)
- Apply the Fire Support Coordinating Measures (01-2840.00-2025)
- Assist an Untrained Observer with the Conduct of a Fire Mission (01-2800.00-3001)

Co/Tm

- ARTEP 71-1-MTP
 - Employ Indirect Fire in the Offense (17-2-0401)
 - Employ Indirect Fire in the Defense (17-2-0402)

TASKS

OTHER LINKAGES

- STP 7-11II-MQS
 - Conduct Fire Support Employment (04-3313.02-0001)

FS NCO's/FOs (STP 6-13F14-SM-TG)

- Request and Adjust Area Fire (061-283-1011)
- Conduct a Suppression Mission (061-283-1013)
- Conduct a Fire-for-Effect Mission (061-283-1015)
- Conduct an Immediate/Quick Smoke Mission (061-283-2021/2023)
- Request Close Air Support (061-284-3030)
- Pass Fire Support Information to Lower, Adjacent, and Higher FA Elements (061-284-3046)
- Coordinate Fires (061-284-4022)

All Soldiers (STP 21-24-SMCT)

- Adjust Indirect Fires (061-283-6003)

COORDINATE, SYNCHRONIZE AND INTEGRATE FIRE SUPPORT REFERENCES

ARTEPs

6-115-20-MTP	Mission Training Plan for the Field Artillery Cannon Battalion Fire Support, Jan 90
6-115-MTP	Mission Training Plan for Field Artillery Cannon Battalion Headquarters and Headquarters Battery; Headquarters, Headquarters and Service Battery; or Service Battery, Nov 90
7-237-10-MTP	MTP for the Tank Platoon, Oct 88
7-247-11-MTP	MTP for the Mechanized Infantry Platoon and Squad (M2 Equipped), Apr 87
7-90-MTP	MTP for the Infantry Mortar Platoon, Section, and Squad, Aug 89
71-1-MTP	The Tank and Mechanized Infantry Company and Company Team, Oct 88
71-2-MTP	Mission Training Plan for the Tank and Mechanized Infantry Battalion Task Force, Oct 88

FMs

6-20-1	Tactics, Techniques, and Procedures for the Field Artillery Cannon Battalion, Nov 90
6-20-20	Tactics, Techniques, and Procedures for Fire Support at Battalion Task Force and Below, Dec 91
6-20-40	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Heavy), Jan 90
7-90	Tactical Employment of Mortars, Oct 92
71-1	Tank and Mechanized Infantry Company Team, Nov 88
71-2	The Tank and Mechanized Infantry Battalion Task Force, Sep 88
71-123	Tactics, Techniques and Procedures for Combined Arms Heavy Forces: Armored and Mechanized Infantry Brigade, Battalion/Task Force, and Company Team, Sep 92
90-14	Rear Battle, Jun 85
101-5	Command and Control for Commanders and Staff (Draft), July 92

STPs

6-13F14-SM-TG	Soldier's Manual and Trainer's Guide: 13F, Fire Support Specialist (SL 1/2/3/4), Sep 91
6-13II-MQS	Military Qualification Standards II, Field Artillery Branch (13) Company Grade Officer's Manual, Mar 91
7-11II-MQS	Military Qualification Standards II, Infantry Branch (11), Company Grade Officer's Manual, Jul 91
17-12II-MQS	Military Qualification Standards II, Armor Branch (13), Company Grade Officer's Manual, Feb 91
21II-MQS	Military Qualification Standards II, Manual for Common Tasks for Lieutenants and Captains, Jan 91
21-24-SMCT	Soldiers Manual of Common Tasks (SL 2-4), Oct 92

CALL

NTC Commander's Memorandum, Nov 85

NTC Lessons Learned Bulletin, Jan 86

NTC Lessons Learned Bulletin, Sept 86

NTC Commander's Comments – The CS Team, 1987

CALL, Vol 1: Heavy Forces, Fall 88

CALL, Non-Mechanized Forces, Spring 89

CALL 90-1, Fire Support for the Maneuver Commander, Feb 90

CALL 90-3, "The Stone Forest", May 90

CALL 90-5, Fire Support Lesson Learned, May 90

CALL 93-4: Combat Training Centers (CTCs) Bulletin, Jul 93

CALL 90-7: Winning in the Desert, Aug 90

CALL 90-8: Winning in the Desert II, Sept 90

CALL 92-4: Fratricide Reducing Self-Inflicted Losses, Apr 92